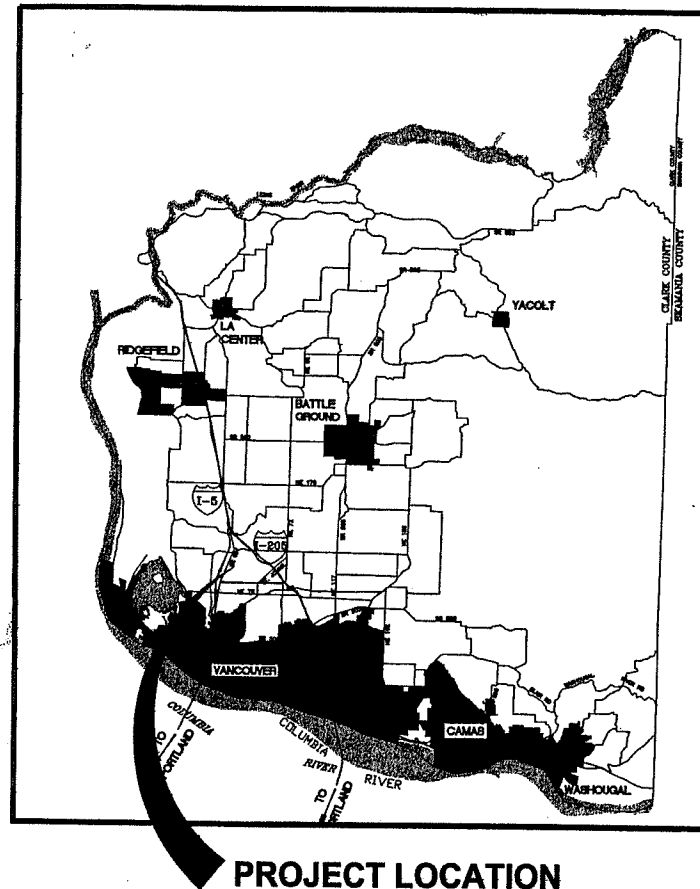
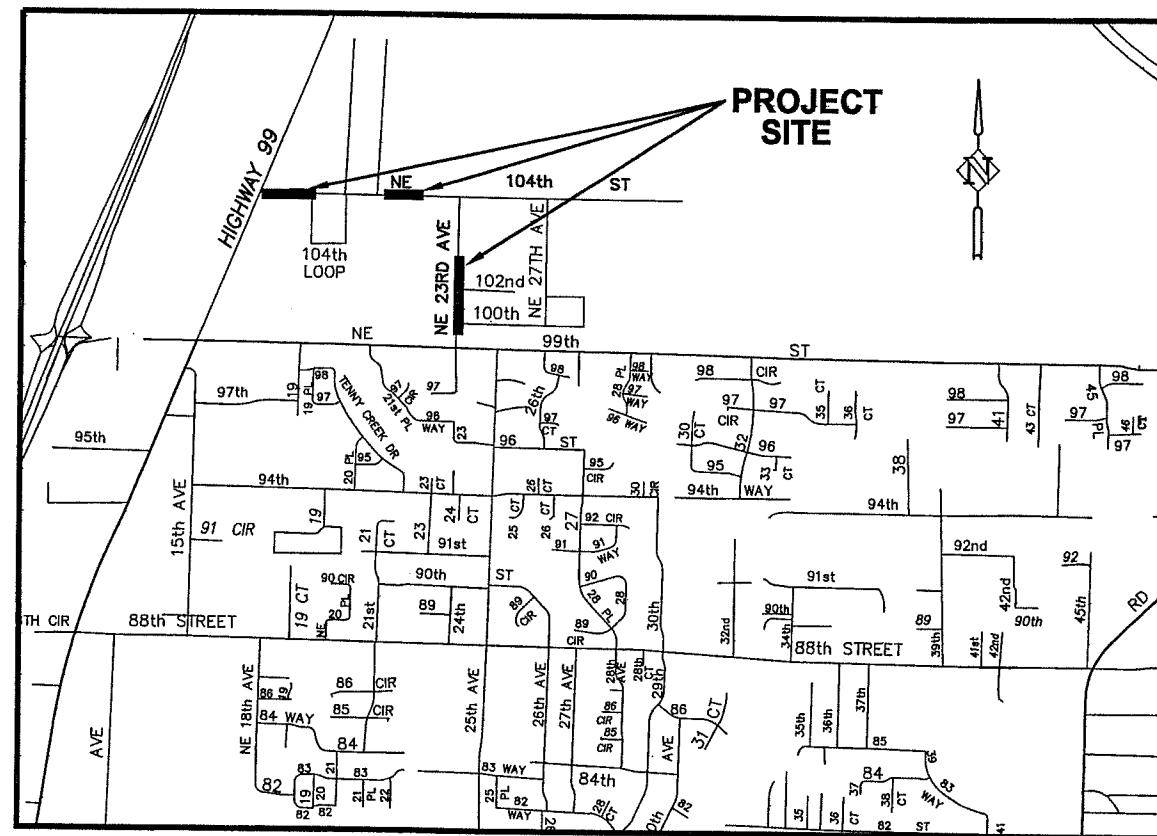


— — — SARAH J. ANDERSON ELEMENTARY PEDESTRIAN PROJECT — — —
N.E. 104TH ST. FROM HWY. 99 TO N.E. 23RD AVE. AND N.E. 23RD AVE. FROM N.E. 104TH ST. TO N.E. 99TH ST.

PLANS FOR THE CONSTRUCTION OF
PEDESTRIAN PATHWAY



PROJECT LOCATION



VICINITY MAP

- SHT. NO.
1. COVER / VICINITY MAP
 2. TYPICAL SECTIONS AND DETAILS
 3. RETAINING WALL DETAILS
 4. EROSION CONTROL NOTES AND DETAILS
 5. CONSTRUCTION DETAILS
 6. DRAINAGE DETAILS
 7. N.E. 104TH ST. NEAR HWY. 99 PLAN AND PROFILE
 8. N.E. 104TH ST. NEAR SARAH J. ANDERSON PLAN AND PROFILE
 9. N.E. 23RD AVE. PLAN AND PROFILE
 10. RETAINING WALL PLAN AND PROFILES
 11. CROSS SECTIONS FOR N.E. 104TH STREET NEAR HWY. 99 STA: 0+50 TO 2+52.43
 12. CROSS SECTIONS FOR N.E. 104TH STREET NEAR HWY. 99 STA: 2+56.97 TO 2+72.47
 13. CROSS SECTIONS FOR N.E. 104TH STREET NEAR SARAH J. ANDERSON STA: 8+30 TO 10+70
 14. CROSS SECTIONS FOR N.E. 104TH STREET NEAR SARAH J. ANDERSON STA: 10+80 TO 11+80
 15. CROSS SECTIONS FOR N.E. 23RD AVENUE STA: 1+60 TO 4+30
 16. CROSS SECTIONS FOR N.E. 23RD AVENUE STA: 4+34.52 TO 6+80

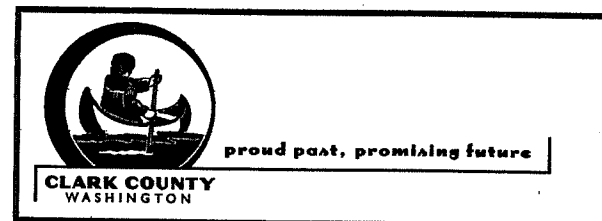
INDEX OF SHEETS

CROSS SECTIONS INCLUDED FOR REVIEW PURPOSES ONLY. SHEETS NOT TO BE INCLUDED WITH CONSTRUCTION PLAN SET.

FOR INFORMATIONAL PURPOSES ONLY
ALL PLAN DETAIL AND INFORMATION IS NOT SHOWN ON THIS
99% COMPLETED SET OF PLANS.
99% DESIGN REVIEW PLANS - JUNE 2005

COMMISSIONERS:

BETTY SUE MORRIS, Chair
MARC BOLDT, Commissioner
STEVEN J. STUART, Commissioner



DEPARTMENT OF
PUBLIC WORKS

ENGINEERING PROGRAM- DESIGN SECTION

HHPR Harper
Houf Peterson
Righellis Inc.
ENGINEERS • PLANNERS • SURVEYORS
1104 MAIN STREET, SUITE 100, VANCOUVER, WA 98660
TEL 360.750.1131 www.hhpr.com FAX 360.750.1141

Project Manager	Quality Assurance	County Engineer
Richard Gamble, P.E.	Heath Henderson, P.E.	Peter Capell, P.E.

CLARK COUNTY
DEPARTMENT OF COMMUNITY DEVELOPMENT
ENGINEERING SERVICES

PLANNING LAND USES
ENGINEERING
INSPECTIONS

Recommended For Approval

Signature	Clark County Fire Marshal	Date
Signature	Clark County Wetlands Biologist Case#	Date
Signature	Clark County Habitat Biologist Case#	Date
Signature	Clark County Grading Review	Date
Signature	Clark County Erosion Control Review	Date
Signature	Clark County Storm Water Plan Review	Date
Signature	Clark County Transportation Review	Date

☐ A ☐ N/A

☐ Stormwater & Erosion Control Ordinance CCC 13.29
☐ Transportation Standards Ordinance CCC 12.03A
☐ Transportation Landscaping Review
☐ Utility Review CCC 13.12A & 12.26A
☐ Clark County Signing & Striping
☐ Road Modification CCC 12.05A.060
☐ CARA CCC 13.70
☐ Geological Hazard Areas Reg. CCC 13.60
☐ Flood Plain Combining District CCC 18.327
☐ Sewer and Water on Plan
☐ Clark County M & O Pavement Def. Testing
☐ Private Stormwater Covenant
☐ Record Drawing Guarantee
☐ UBC Chapter 33

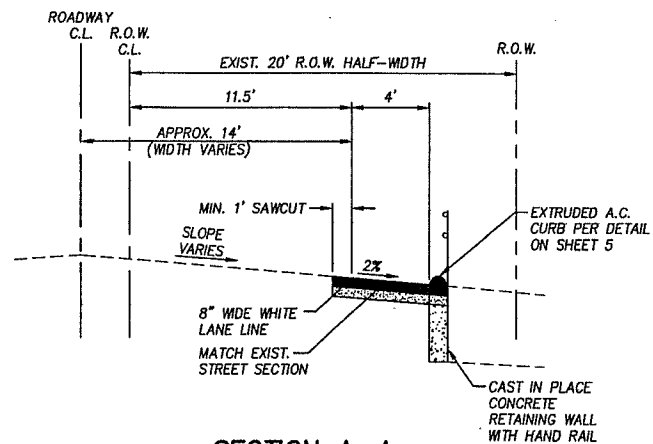
RECOMMENDED for APPROVAL

Engineering Team Leader Date

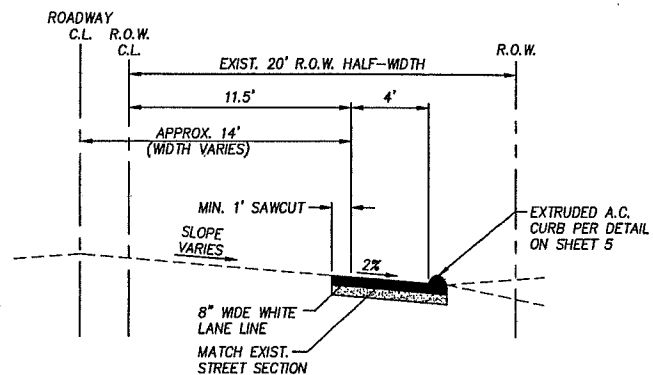
APPROVED for CONSTRUCTION

Clark County Engineer Date

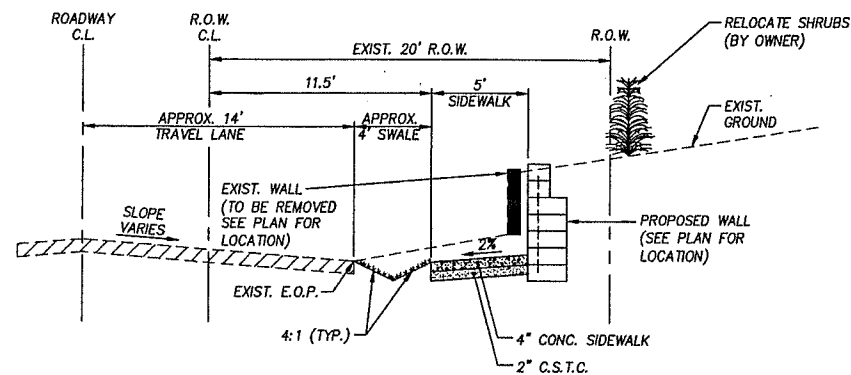
Plans Approved for Construction by the County does not in any way relieve the engineer of responsibility to meet all requirements of the County or obligation to protect life, health, and property of the public. The plan for any project shall be revised or supplemented at any time it is determined that the full requirements of the County have not been met.



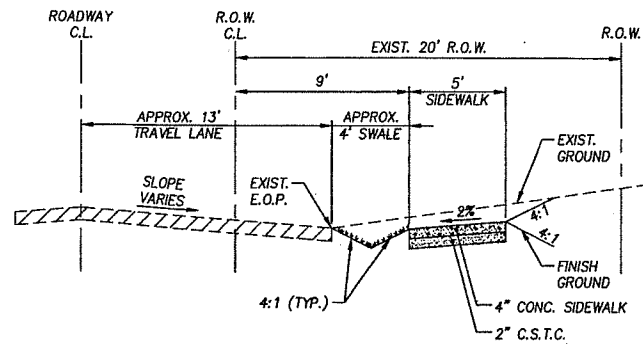
SECTION A-A
N.E. 104TH STREET SECTION STA: 1+01.50
TO 1+20.00 LOOKING EAST
N.T.S.



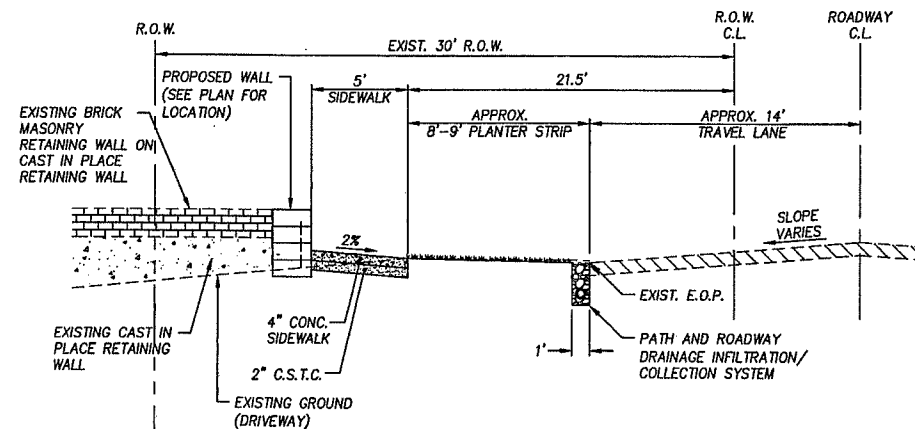
SECTION B-B
N.E. 104TH STREET SECTION STA: 0+78.00 TO
1+01.50 AND 1+20.00 TO 2+72.49 LOOKING EAST
N.T.S.



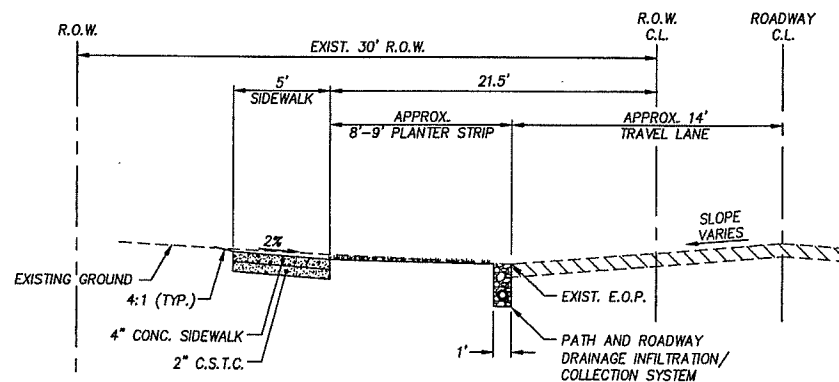
SECTION C-C
N.E. 104TH STREET SECTION STA: 8+29.78 TO
9+90.00 LOOKING EAST
N.T.S.



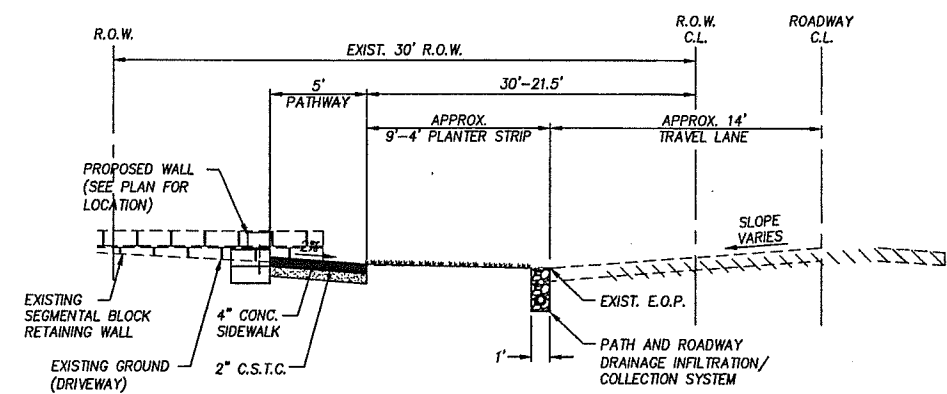
SECTION D-D
N.E. 104TH STREET SECTION STA: 9+90.00
TO 11+64.00 LOOKING EAST
N.T.S.



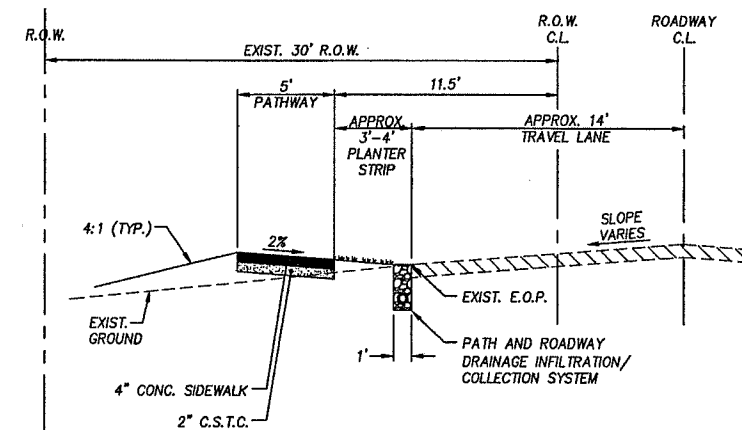
SECTION E-E
N.E. 23RD AVENUE STA: 2+76.00 TO
2+91.00 LOOKING NORTH
N.T.S.



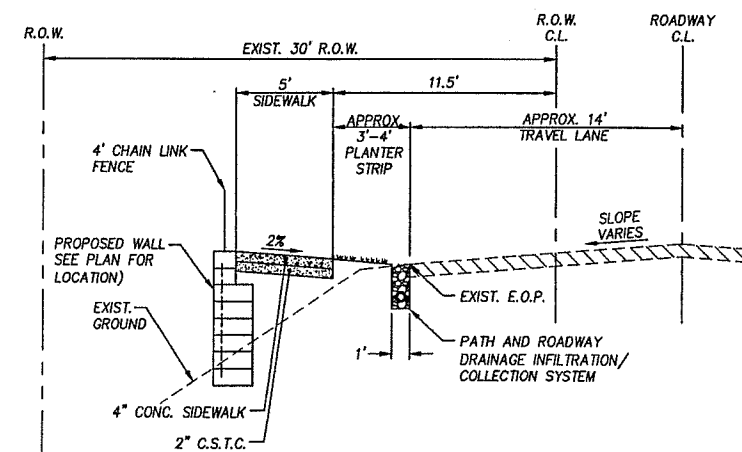
SECTION F-F
N.E. 23RD AVENUE STA: 2+91.00 TO
3+74.00 LOOKING NORTH
N.T.S.



SECTION G-G
N.E. 23RD AVENUE STA: 3+74.00 TO
3+86.00 LOOKING NORTH
N.T.S.



SECTION H-H
N.E. 23RD AVENUE STA: 3+86.00 TO
5+89.50 LOOKING NORTH
N.T.S.



SECTION I-I
N.E. 23RD AVENUE STA: 5+89.50 TO
6+82.00 LOOKING NORTH
N.T.S.

DESIGNED: SUN/CLH
DRAWN: SUN/TLH
CRP: 1-800-553-4344
HOR: 1"=20'
VERT: 1"=5'
DATE: 6/24/05
DWG: NORTHWEST UTILITIES NOTIFICATION CENTER
SHEET 2 OF 10

CALL 48 HOURS BEFORE YOU DIG

CLARK COUNTY
WASHINGTON

CLARK COUNTY
WASHINGTON

ENGINEERING PROGRAM
DESIGN SECTION

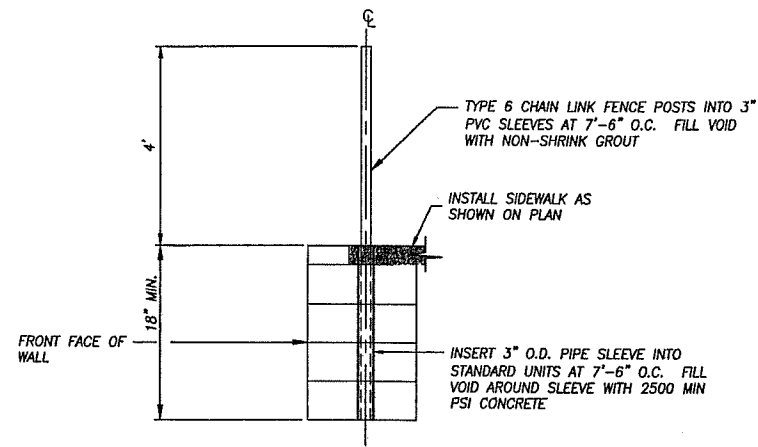
SARAH J. ANDERSON ELEMENTARY
PEDESTRIAN PROJECT

Harper Houf Peterson
Righellis Inc.
ENGINEERS, PLANNERS, SURVEYORS
1104 Main Street, Suite 100, Vancouver, WA 98660
TEL: 360.750.1131 www.hhp.com FAX: 360.750.1141

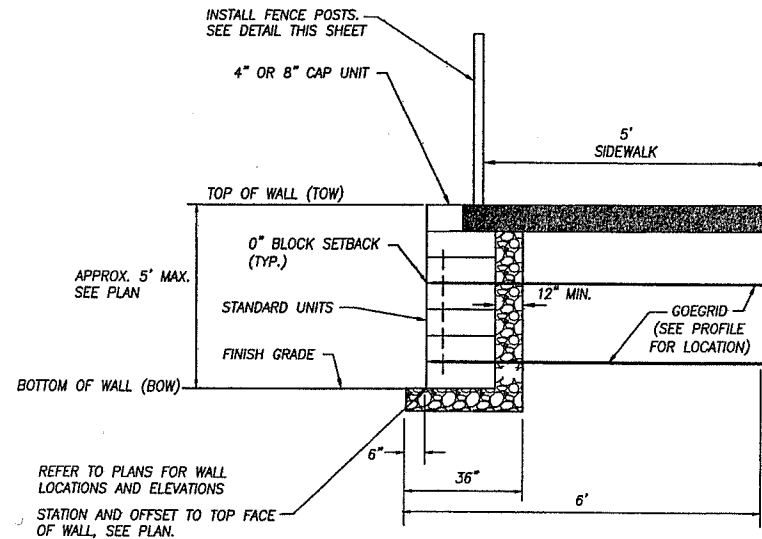
CLARK COUNTY
WASHINGTON

CLARK COUNTY
WASHINGTON

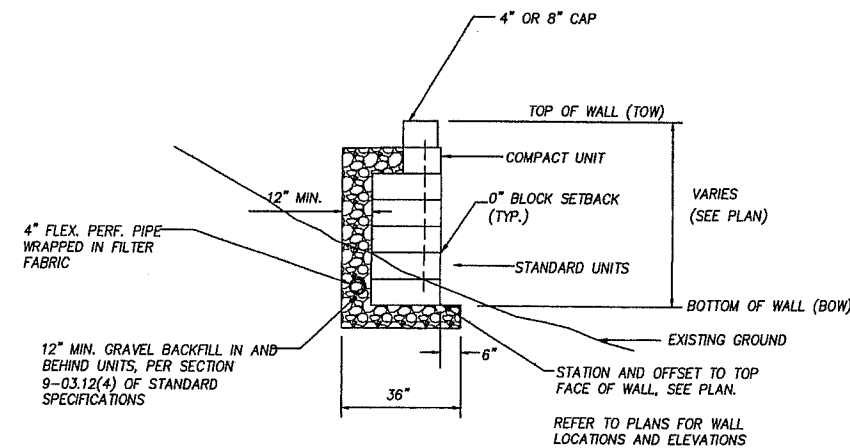
CLARK COUNTY
WASHINGTON



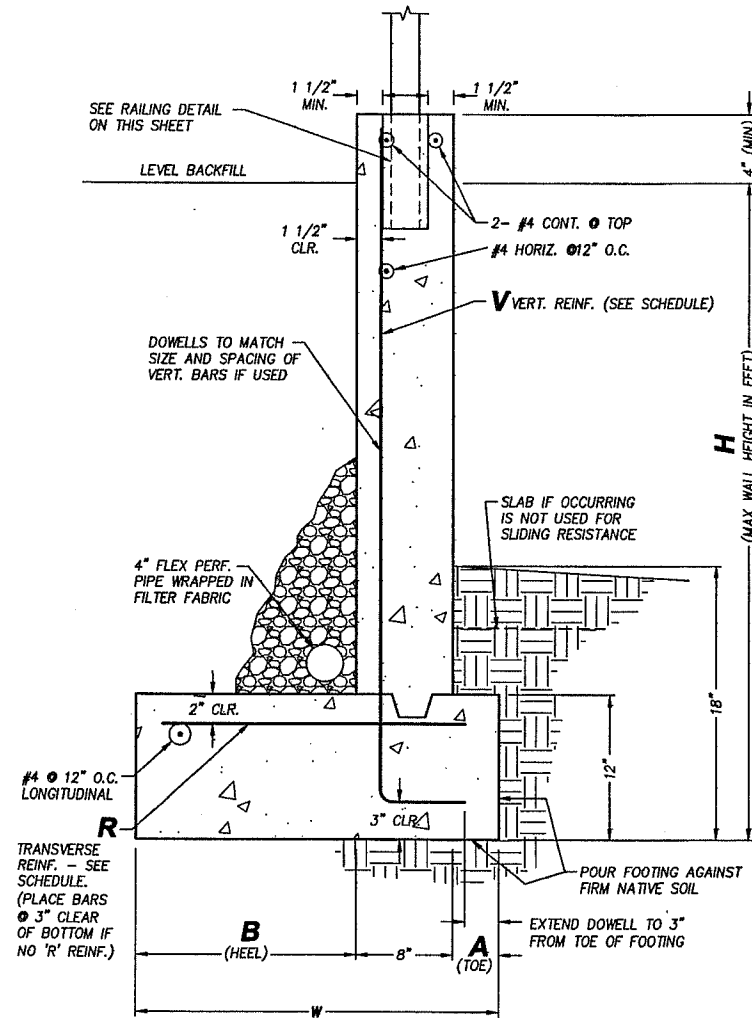
RETAINING WALL FENCE POST DETAIL- WALL "E"
N.T.S.



WALL "E" - SEGMENTAL BLOCK SECTION
N.T.S.



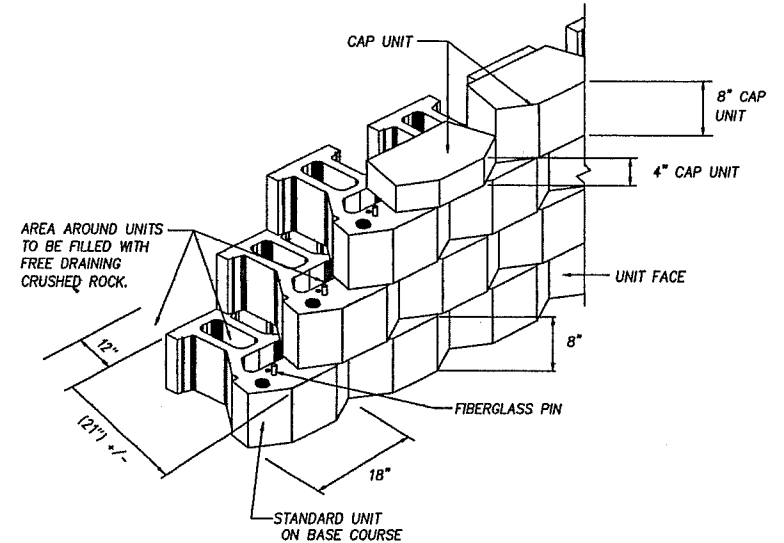
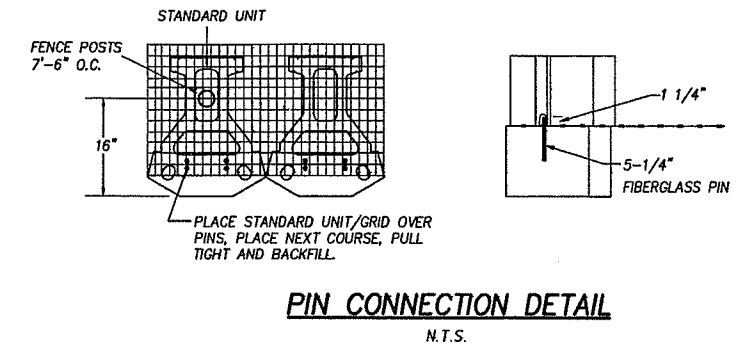
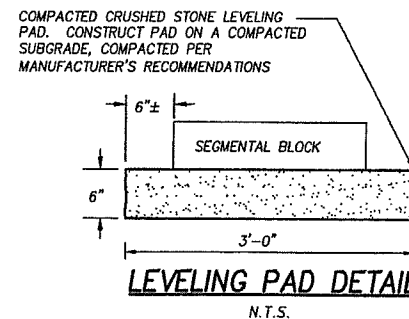
TYPICAL SEGMENTAL BLOCK SECTION
N.T.S.



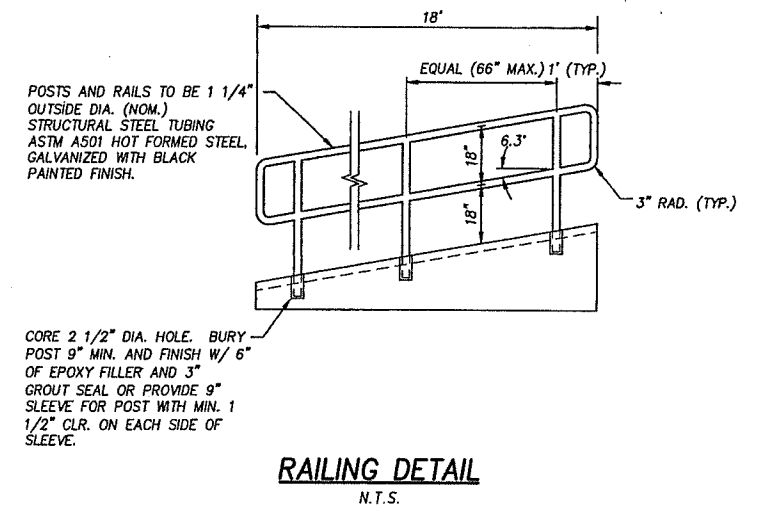
H	W	A	B	V	R
MAX HT. IN FEET	TOTAL WIDTH IN INCHES	TOE LENGTH IN INCHES	HEEL LENGTH IN INCHES	VERT. REINF. IN WALL	TRANSVERSE REINF. IN FOOTING
2'-6"	8"	4"	6"	#4 @ 12" O.C.	NOT REQUIRED

NOTES:
RETAINING WALLS ARE DESIGNED FOR THE FOLLOWING PARAMETERS:
MAX BEARING PRESSURE = 1500 PSI
SUBGRADE COEFFICIENT OF FRICTION = 0.30
SOIL ACTIVE PRESSURE = 35 (H) PCF
SOIL PASSIVE PRESSURE = 250 (H) PCF

CAST IN PLACE CONCRETE RETAINING WALL DETAIL
N.T.S.



SEGMENTAL BLOCK RETAINING WALL TYPICAL STANDARD UNITS
N.T.S.



DESIGNED: SUN/CLH
DRAWN: SUN/TLH
CRP: 1-800-553-4344
HOR: 1'-20'
VERT: "It's the Low"
DATE: 6/24/05
DWG: NORTHWEST UTILITIES NOTIFICATION CENTER
SHEET 3 OF 10

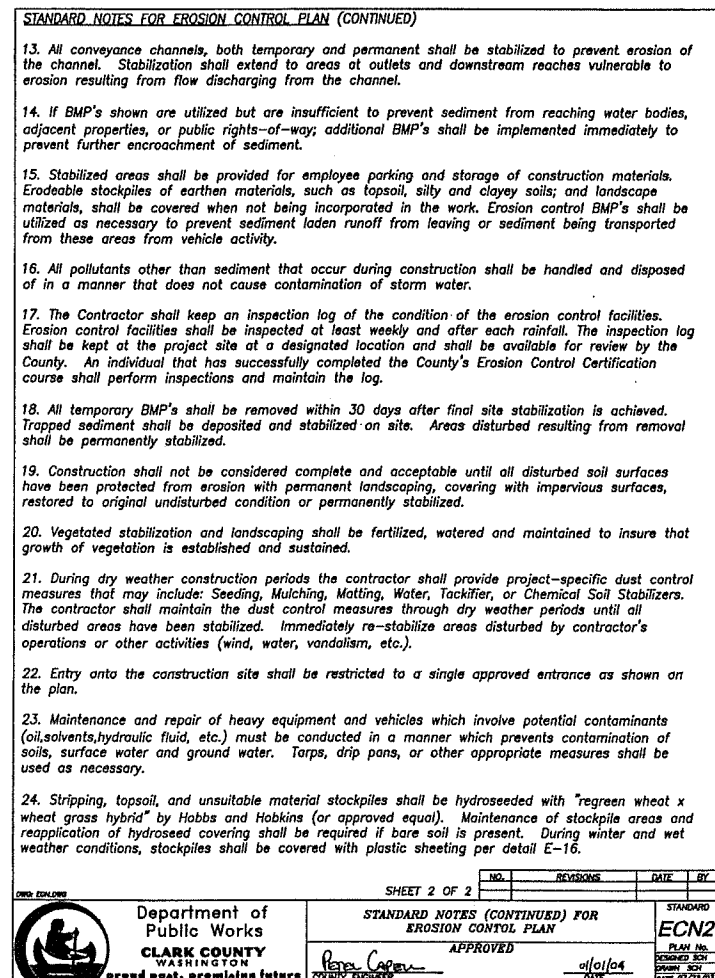
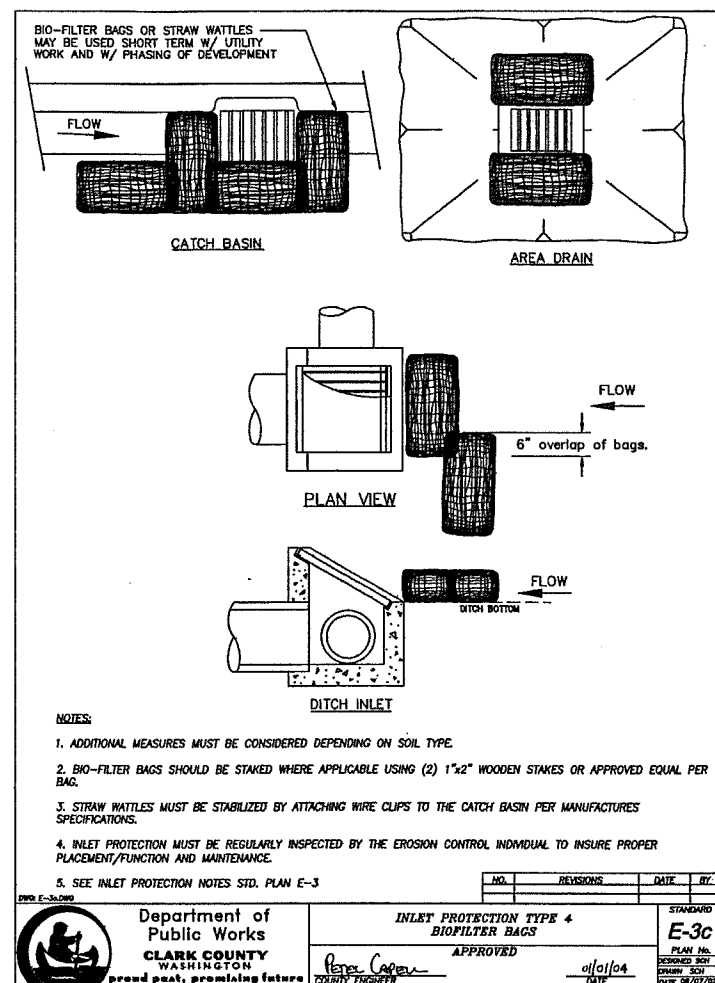
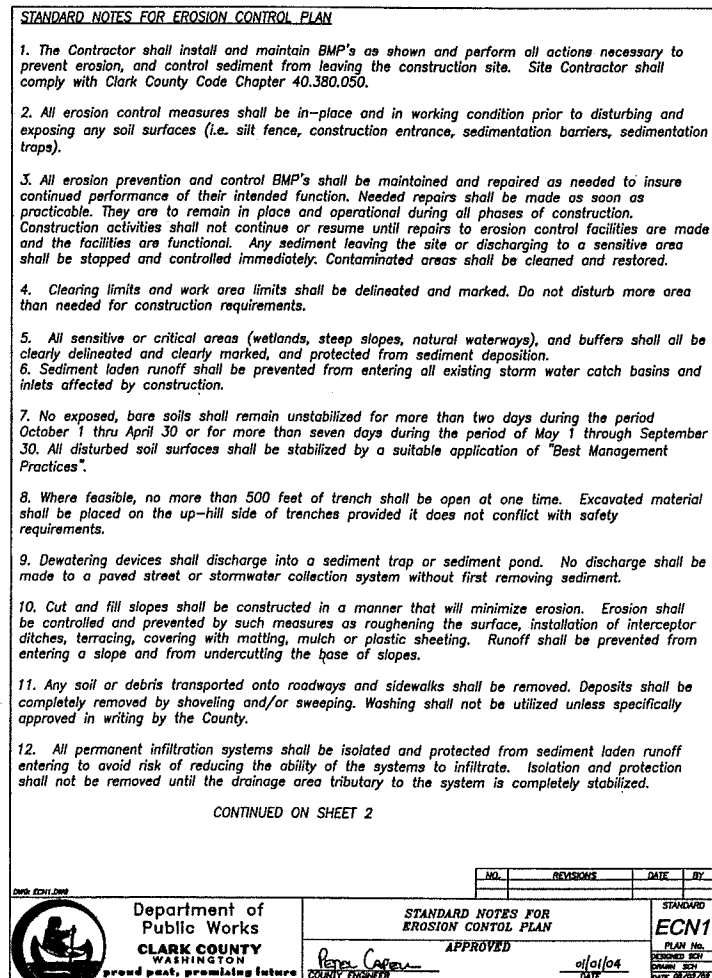
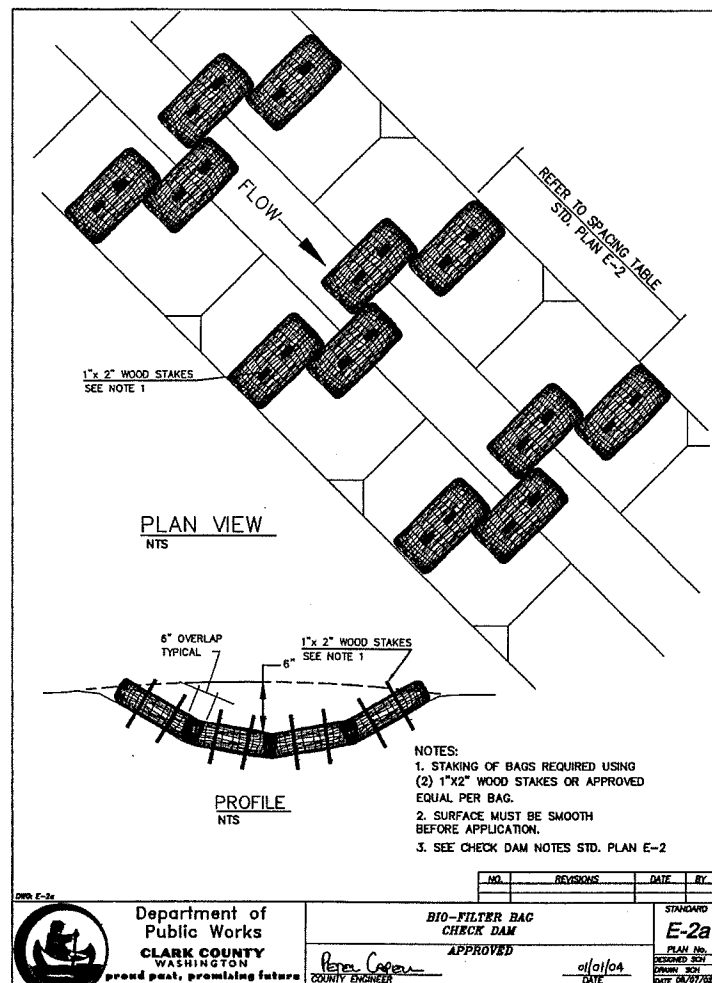
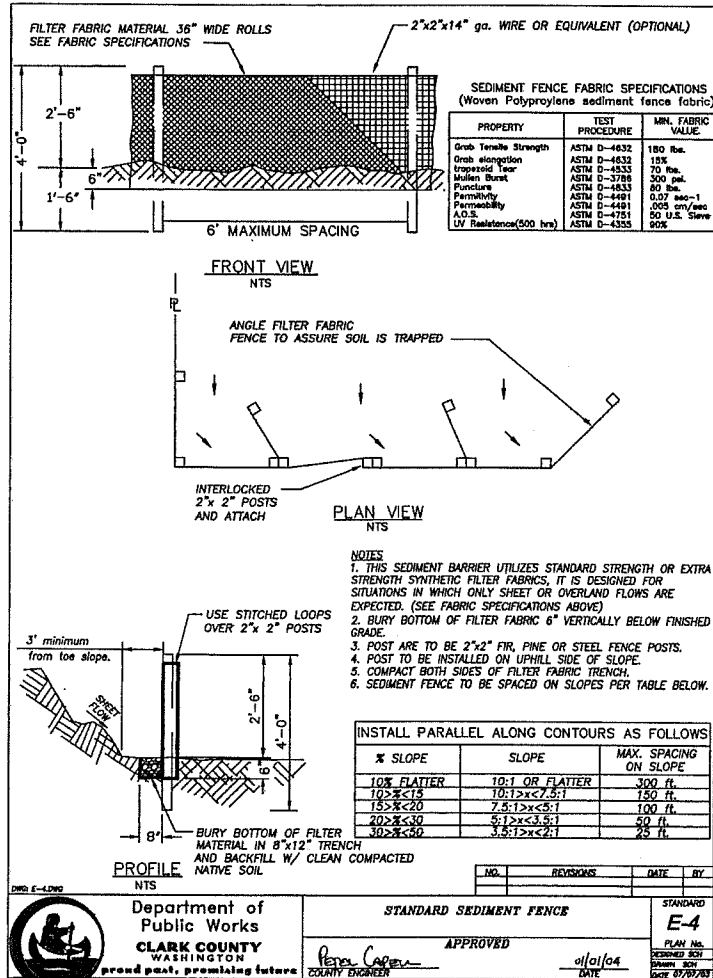
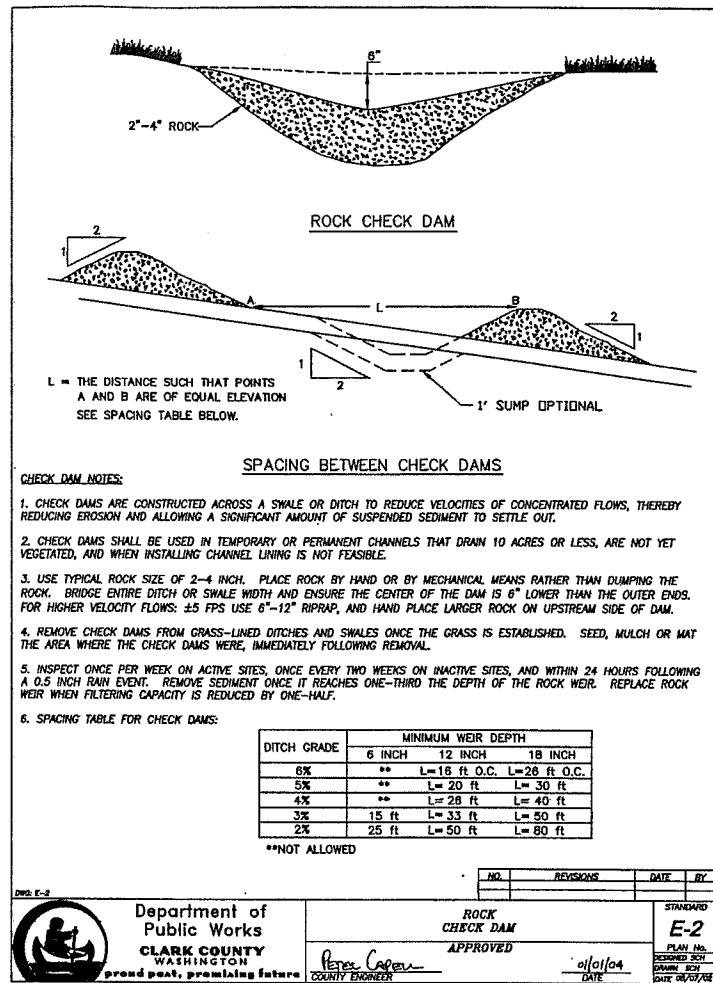
CALL 48 HOURS BEFORE YOU DIG

CLARK COUNTY WASHINGTON

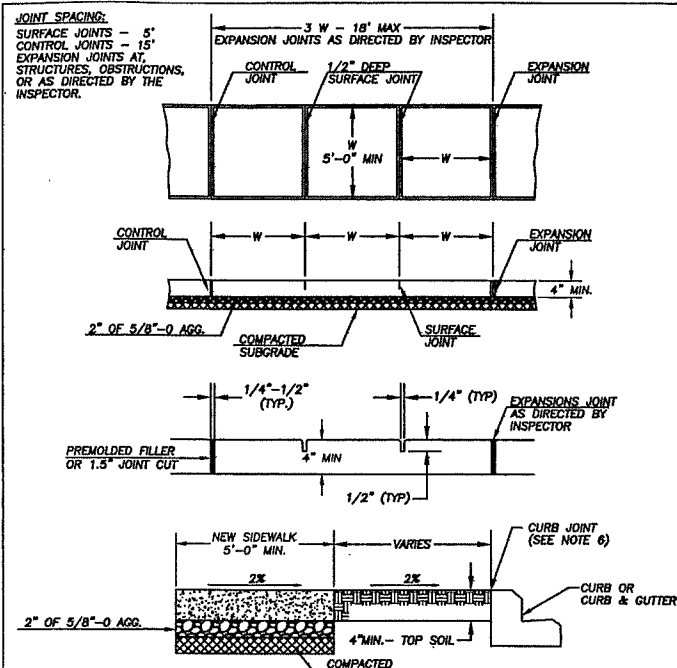
ENGINEERING PROGRAM
DESIGN SECTION
SARAH J. ANDERSON ELEMENTARY PEDESTRIAN PROJECT

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS • SURVEYORS
1104 Main Street, Suite 100, Vancouver, WA 98660
TEL 360.750.1131 FAX 360.750.1141 www.hhpr.com

PROUD PART, PROMISING FUTURE



NOTE:
SIGNIFICANT VARIATION AND DEGREE OF EROSION CONTROL EFFORT WILL BE DICTATED BY WEATHER CONDITIONS. THE DEVELOPER AND CONTRACTOR SHOULD BE PREPARED TO PROVIDE EXTRA EROSION CONTROL PROVISIONS AND EFFORT DURING WINTER AND WET WEATHER CONDITIONS BEYOND THAT NORMALLY REQUIRED DURING SUMMER AND DRY WEATHER CONDITIONS. FINE GRAINED AND UNCONSOLIDATED SOILS ON SLOPING SITES MAY BECOME UNSTABLE WHEN SUBJECT TO EXCESSIVE MOISTURE.



- NOTES:**
1. CONCRETE SHALL BE 3,000 PSI MIN. (CLASS 3000), 3 1/2" SLUMP (± 1")
 2. FINISH SHALL BE MEDIUM BROOM PERPENDICULAR TO PEDESTRIAN TRAFFIC UNLESS OTHERWISE DIRECTED.
 3. ALL EXISTING EDGES SHALL BE SAWCUT.
 4. NO FILLER REQUIRED FOR SURFACE JOINTS.
 5. ALL JOINTS AND EDGES SHALL BE FINISHED WITH 1/4" RADIUS EDGER (3" SMOOTH EACH SIDE)
 6. FOR SIDEWALKS ADJACENT TO THE CURB AND POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS.

NO.	REVISIONS	DATE	BY
1	CHANGE SUBGRADE	10/28/04	AS
2	ADD 1/2" AGG. & NOTES	10/28/04	SCB

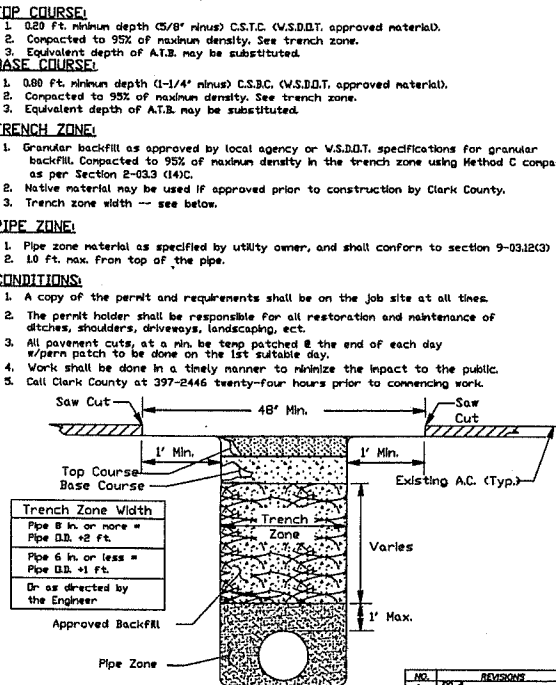
Department of Public Works
CLARK COUNTY WASHINGTON
PROUD PAST, PROMISING FUTURE

APPROVED: *Peter Capen* COUNTY ENGINEER
DATE: 01/01/04

STANDARD F12
PLAN No. 10/28/04
REVISIONS: 10/28/04
DATE: 10/28/04

OPEN CUT UTILITY TRENCH BACKFILL DETAIL (RESIDENTIAL)

- SURFACING:**
1. All ACP shall be saw cut to provide a straight, clean edge prior to paving.
 2. The cut line shall be one continuous straight line from the outer excavation limits of manhole, valve box, etc. to manhole, valve box, etc.
 3. Pave with an 0.85 ft. minimum compacted depth ACP, or match existing, whichever is greater.
 4. Lifts for ACP (Class AB) shall be an 0.15 ft. minimum and 0.25 ft. maximum for non-surface lifts (0.25" maximum for surface lifts) the temperature shall be 250 degree minimum, 250 degree maximum, compacted to the satisfaction of the engineer.
 5. All joints shall be tacked, sealed and sanded.
 6. When surfacing exists on both sides of the trench, new ACP will be a minimum of 48" wide.
 7. Trench shall be placed until paved.
- TOP COURSE:**
1. 0.25 ft. minimum depth (5/8" minus) C.S.T.C. (V.S.D.B.T. approved material).
 2. Compacted to 95% of maximum density. See trench zone.
 3. Equivalent depth of A.T.B. may be substituted.
- BASE COURSE:**
1. 0.88 ft. minimum depth (1-1/4" minus) C.S.B.C. (V.S.D.B.T. approved material).
 2. Compacted to 95% of maximum density. See trench zone.
 3. Equivalent depth of A.T.B. may be substituted.
- TRENCH ZONE:**
1. Granular backfill as approved by local agency or V.S.D.B.T. specifications for granular backfill. Compacted to 95% of maximum density in the trench zone using Method C compaction as per Section 2-03.3 (4)(c).
 2. Native material may be used if approved prior to construction by Clark County.
 3. Trench zone width -- see below.
- PIPE ZONE:**
1. Pipe zone material as specified by utility owner, and shall conform to section 9-03.12(3) V.S.D.B.T. Specs.
 2. 10 ft. max. from top of the pipe.
- CONDITIONS:**
1. A copy of the permit and requirements shall be on the job site at all times.
 2. The permit holder shall be responsible for all restoration and maintenance of ditches, shoulders, driveways, landscaping, etc.
 3. All pavement cuts, at a min. be temp. patched @ the end of each day w/perm patch to be done on the 1st suitable day.
 4. Work shall be done in a timely manner to minimize the impact to the public.
 5. Call Clark County at 397-2446 twenty-four hours prior to commencing work.

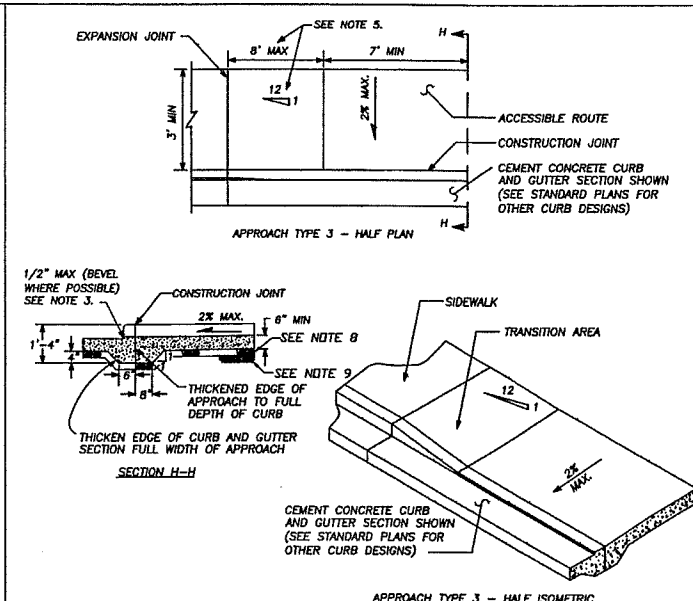


NO.	REVISIONS	DATE	BY
1	ADD 1/2" AGG. & NOTES	10/28/04	AS
2	CHANGE SUBGRADE	10/28/04	SCB

Department of Public Works
CLARK COUNTY WASHINGTON
PROUD PAST, PROMISING FUTURE

APPROVED: *Peter Capen* COUNTY ENGINEER
DATE: 01/01/04

STANDARD U3
PLAN No. 10/28/04
REVISIONS: 10/28/04
DATE: 10/28/04



- NOTES:**
1. A MINIMUM 3' WIDE ACCESSIBLE ROUTE SHALL BE MAINTAINED IN ALL PEDESTRIAN ACCESSIBLE AREAS.
 2. CONTRACTION JOINTS SHALL BE PLACED ALONG SIDEWALKS IN ACCORD WITH SIDEWALK DETAIL. ALL JOINTS SHALL BE CLEANED AND EGGED.
 3. CHANGES IN LEVEL UP TO 1/4" MAY BE VERTICAL AND WITHOUT EDGE TREATMENT. CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 2:1.
 4. TRANSITION AREA TO BE SLOPED AT 1V TO 12H, UNLESS STREET GRADE WOULD CREATE A TRANSITION LENGTH GREATER THAN 8', THEN THE MAXIMUM LENGTH OF 8' GOVERNS SLOPE.
 5. CEMENT CONCRETE APPROACHES SHALL BE CONSTRUCTED OF AIR-ENTRAINED CONCRETE CLASS 3000 AND MAY BE POURED INTEGRAL WITH CURB.
 6. SAWCUT AND REMOVED FOR INSTALLATION OF APPROACH.
 7. COMMERCIAL DRIVEWAY REQUIRES REINFORCING.
 8. STEEL (6"x6"x10 GA MESH) MIN. 3" COVER.
 9. 3" DEPTH 3/4"-0 CRUSHED AGGREGATE BASE & COMPACTED TO 95% OF MAX. DRY DENSITY.
 10. SUBGRADE PREPARED PER WSDOT STD. SPEC. 2-06.3(1)

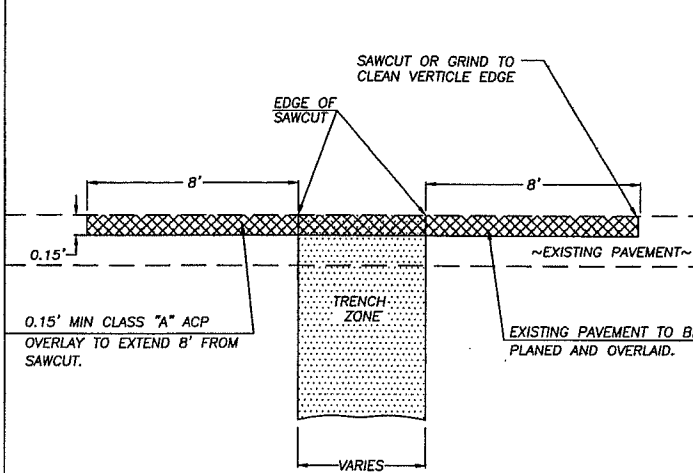
NO.	REVISIONS	DATE	BY
1	ADD 1/2" AGG. & NOTES	10/28/04	AS
2	CHANGE SUBGRADE	10/28/04	SCB

Department of Public Works
CLARK COUNTY WASHINGTON
PROUD PAST, PROMISING FUTURE

APPROVED: *Peter Capen* COUNTY ENGINEER
DATE: 01/01/04

STANDARD F16
PLAN No. 10/28/04
REVISIONS: 10/28/04
DATE: 10/28/04

CEMENT CONCRETE APPROACH DETAIL - TYPE 3



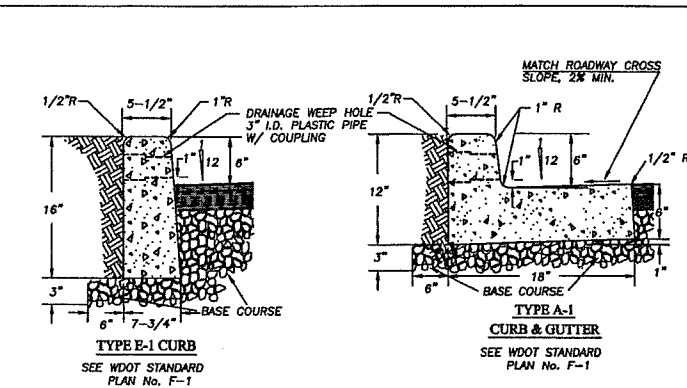
- NOTE:** THIS DETAIL IS TO BE USED ON URBAN ARTERIALS OR RURAL COLLECTORS OR PAVEMENT SURFACE RECONSTRUCTION AND/OR WHEN THE EXISTING ROADWAY IS LESS THAN 5 YEARS OLD.
- SEE APPROPRIATE DETAIL FOR TRENCH ZONE RECONSTRUCTION REQUIREMENTS.
- TO BE USED AS AN ALTERNATIVE IN LIEU OF FULL REMOVAL AND REPLACEMENT OF EFFECTED AREA AND APPROVED BY CLARK COUNTY.

NO.	REVISIONS	DATE	BY
1	ADD 1/2" AGG. & NOTES	10/28/04	AS
2	CHANGE SUBGRADE	10/28/04	SCB

Department of Public Works
CLARK COUNTY WASHINGTON
PROUD PAST, PROMISING FUTURE

APPROVED: *Peter Capen* COUNTY ENGINEER
DATE: 01/01/04

STANDARD U6
PLAN No. 10/28/04
REVISIONS: 10/28/04
DATE: 10/28/04



- NOTES:**
1. CONCRETE SHALL BE 3000 PSI MIN. (CLASS 3000) 3 1/2" SLUMP (MAX.)
 2. CURBS ADJACENT TO PAVEMENT OR SIDEWALK TO HAVE EXPANSION AND/OR CONTRACTION JOINTS TO MATCH EXISTING PATTERNS.
 3. 3/8" EXPANSION JOINTS TO BE PROVIDED AT EACH POINT OF TANGENCY OF THE CURB, COLD JOINTS, EACH SIDE OF INLET STRUCTURES AND DRIVEWAYS. MATERIAL TO BE PRE-MOLDED, ASPHALT IMPREGNATED AND NON EXTRUDING.
 4. CONTRACTION JOINT SPACING NOT TO EXCEED 15 FEET. THE DEPTH OF THE JOINT SHALL BE AT LEAST 1-1/2 INCHES. WEEP HOLES TO BE CENTERED WITH CONTRACTION JOINTS.
 5. BASE COURSE SHALL BE TO SUBGRADE OF STREET SECTION OR 3 INCHES, WHICHEVER IS GREATER, AND SHALL EXTEND 6" BEHIND THE CURB.
 6. DRAINAGE WEEP HOLES TO BE 3" I.D. PLASTIC PIPE WITH COUPLING. FINISH PIPE END FLUSH WITH FACE OF CURB.
 7. GROUT ANY VOIDS IN CONCRETE SURROUNDING PIPE.
 8. DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE CORE DRILLED.
 9. CURB TO BE BRUSH FINISHED. ALL EXISTING EDGES SHALL BE SAWCUT.
 10. ALL MATERIALS AND WORKMANSHIP FOR TYPE E-1 & A-1 SHALL BE IN ACCORDANCE WITH WDOT STANDARD PLAN No. F-1, APPROVED 7/18/97 OR MOST CURRENT REVISION.

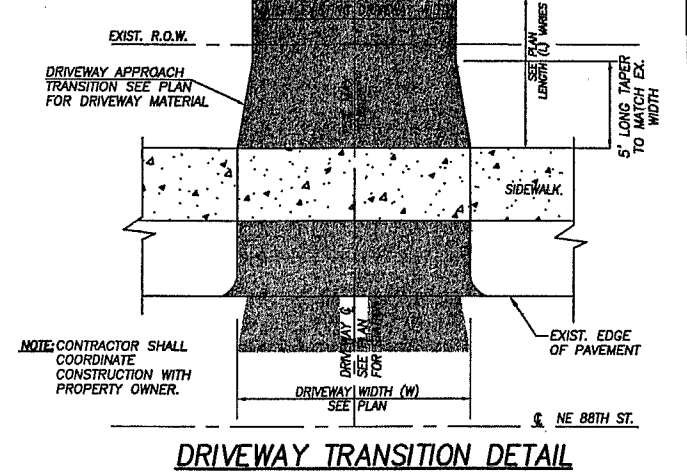
NO.	REVISIONS	DATE	BY
1	ADD 1/2" AGG. & NOTES	10/28/04	AS
2	CHANGE SUBGRADE	10/28/04	SCB

Department of Public Works
CLARK COUNTY WASHINGTON
PROUD PAST, PROMISING FUTURE

APPROVED: *Peter Capen* COUNTY ENGINEER
DATE: 01/01/04

STANDARD F18
PLAN No. 10/28/04
REVISIONS: 10/28/04
DATE: 10/28/04

CONCRETE CURBS



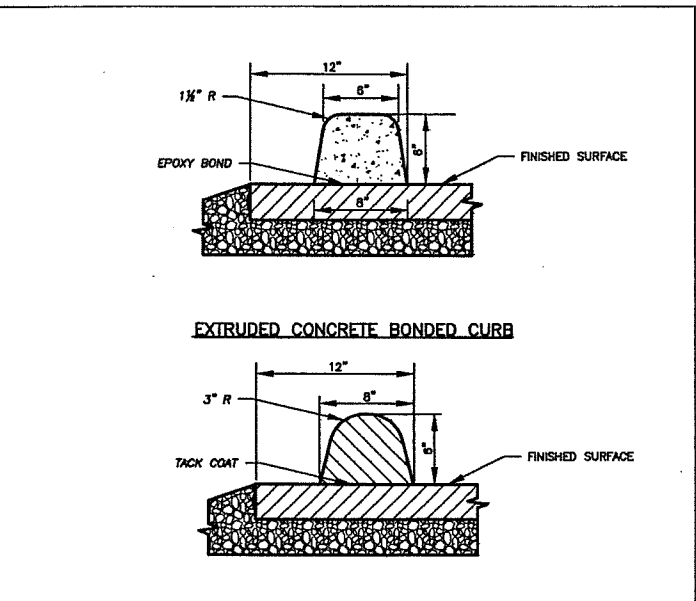
- NOTE:** CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH PROPERTY OWNER.

NO.	REVISIONS	DATE	BY
1	ADD 1/2" AGG. & NOTES	10/28/04	AS
2	CHANGE SUBGRADE	10/28/04	SCB

Department of Public Works
CLARK COUNTY WASHINGTON
PROUD PAST, PROMISING FUTURE

APPROVED: *Peter Capen* COUNTY ENGINEER
DATE: 01/01/04

STANDARD U6
PLAN No. 10/28/04
REVISIONS: 10/28/04
DATE: 10/28/04



- NOTES:**
1. CONCRETE SHALL BE 3000 PSI MIN., (CL 3000) 3-1/2" SLUMP (MAX.).
 2. THE EPOXY RESIN SYSTEM SHALL BE FURNISHED IN THE TYPE, GRADE, AND CLASS AS SPECIFIED ACCORDING TO CURRENT ASTM C 881.
 3. CONCRETE CURBS ADJACENT TO PAVEMENT OR SIDEWALK TO HAVE EXPANSION AND/OR CONTRACTION JOINTS TO MATCH EXISTING PATTERNS.
 4. FOR CONCRETE CURBS 3/8" EXPANSION JOINTS SHALL BE PLACED AT 45" MAXIMUM SPACING, ON BOTH SIDES OF CATCH BASINS, AT TOPS OF DRIVEWAYS, AND ALL CHANGES IN DIRECTION. 1 1/2" CONTRACTION JOINTS TO BE PLACED AT 10' INTERVALS.
 5. USE OF EXTRUDED CURB REQUIRES PRE-APPROVAL BY COUNTY ENGINEER.

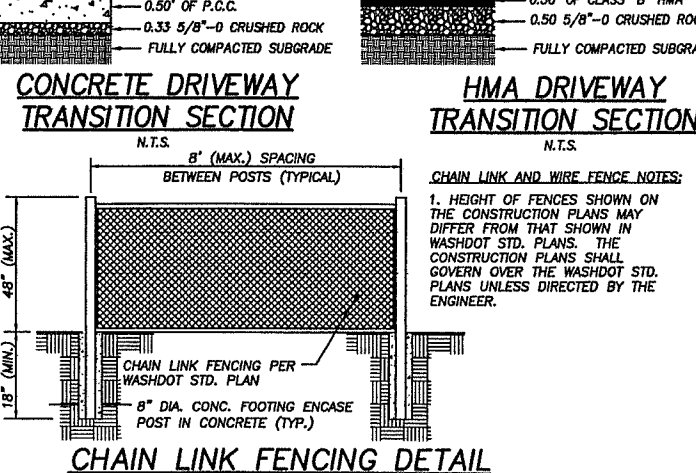
NO.	REVISIONS	DATE	BY
1	ADD 1/2" AGG. & NOTES	10/28/04	AS
2	CHANGE SUBGRADE	10/28/04	SCB

Department of Public Works
CLARK COUNTY WASHINGTON
PROUD PAST, PROMISING FUTURE

APPROVED: *Peter Capen* COUNTY ENGINEER
DATE: 01/01/04

STANDARD F18a
PLAN No. 10/28/04
REVISIONS: 10/28/04
DATE: 10/28/04

EXTRUDED CURBS



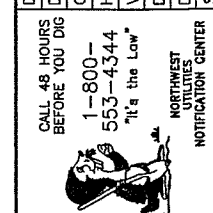
- CHAIN LINK AND WIRE FENCE NOTES:**
1. HEIGHT OF FENCES SHOWN ON THE CONSTRUCTION PLANS MAY DIFFER FROM THAT SHOWN IN WASHDOT STD. PLANS. THE CONSTRUCTION PLANS SHALL GOVERN OVER THE WASHDOT STD. PLANS UNLESS DIRECTED BY THE ENGINEER.

NO.	REVISIONS	DATE	BY
1	ADD 1/2" AGG. & NOTES	10/28/04	AS
2	CHANGE SUBGRADE	10/28/04	SCB

Department of Public Works
CLARK COUNTY WASHINGTON
PROUD PAST, PROMISING FUTURE

APPROVED: *Peter Capen* COUNTY ENGINEER
DATE: 01/01/04

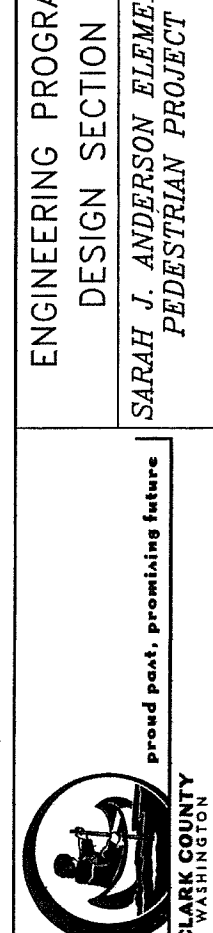
STANDARD U6
PLAN No. 10/28/04
REVISIONS: 10/28/04
DATE: 10/28/04

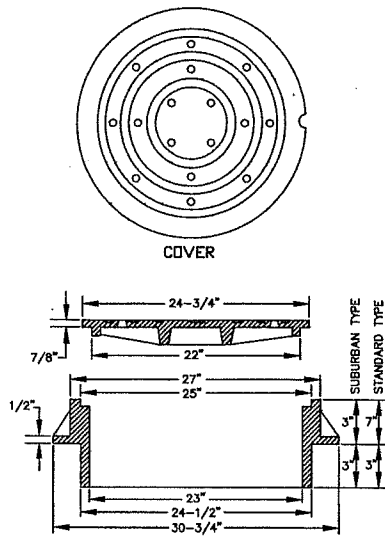


Harper Houf Peterson Righellis Inc.
ENGINEERS & ARCHITECTS
1104 MAIN STREET, SUITE 100, VANCOUVER, WA 98660
TEL: 360/750.1131 WWW.HHPRI.COM FAX 360/750.1141

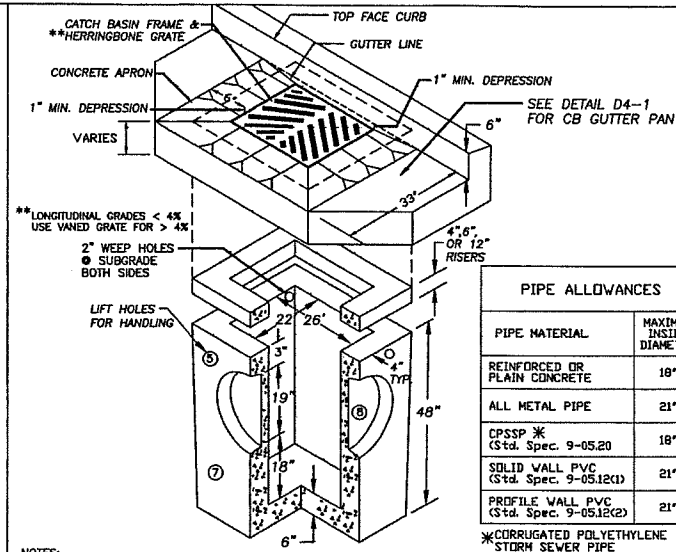
ENGINEERING PROGRAM
DESIGN SECTION
SARAH J. ANDERSON ELEMENTARY
PEDESTRIAN PROJECT

PROUD PAST, PROMISING FUTURE
CLARK COUNTY WASHINGTON

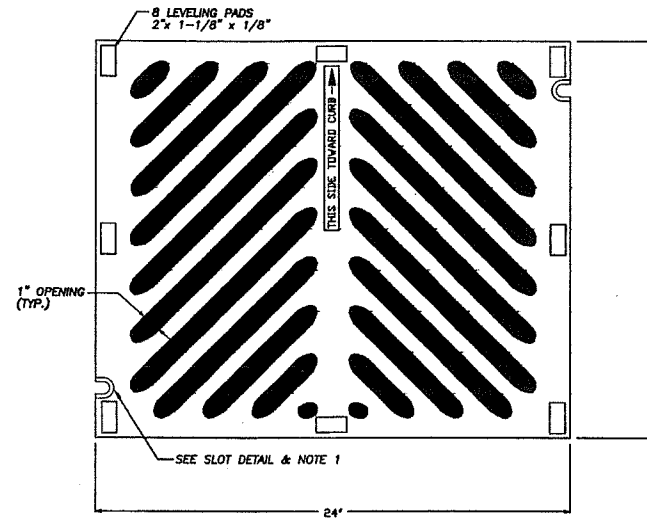




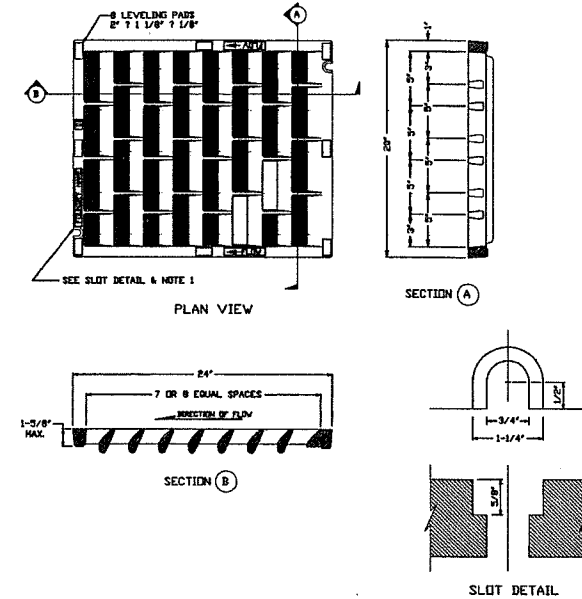
- NOTES:
1. USE SUBURBAN TYPE ONLY IN NON-TRAFFIC AREAS, AND ONLY WITH APPROVAL BY COUNTY.
 2. COVER MATERIAL TO BE DUCTILE IRON ASTM A538 GRADE 80-55-08
 3. FRAME MATERIAL TO BE GRAY CAST IRON ASTM A-48 CLASS 30.
 4. SEE WSDOT STANDARD SPECIFICATIONS SEC. 7.05
 5. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
 6. NOTCH LID FOR LIFTING HOOK.



- NOTES:
1. CURB INLET TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 (AASHTO M 199) & C890 UNLESS SHOWN ON PLANS OR NOTED IN STANDARD SPECIFICATIONS.
 2. REINFORCING FOR INLET UNIT, 3 EA. #4 HORIZONTAL BARS.
 3. REINFORCING FOR TOP UNIT, 2 EA. #5 HORIZONTAL BARS.
 4. ALL REBAR TO MEET ASTM A615 GRADE 60.
 5. AS AN ACCEPTABLE ALTERNATIVE TO REBAR, WELDED WIRE FABRIC HAVING A MIN. AREA OF 0.12 SQUARE INCHES PER FOOT MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A497. WIRE FABRIC SHALL NOT BE PLACED IN KNOCKOUTS.
 6. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4,000.
 7. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
 8. KNOCKOUTS OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAM. PLUS INLET WALL THICKNESS.
 9. ROUND KNOCKOUTS MAY BE ON ALL 4 SIDES WITH MAX. DIAM. OF 20".
 10. THE MAX. DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
 11. ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUTED TO THE SATISFACTION OF ENGINEER.
 12. CATCH BASIN FRAME AND GRATE SHALL BE IN ACCORDANCE WITH WDOT STANDARD SPECIFICATIONS AND MEET THE STRENGTH REQUIREMENTS OF FEDERAL SPECIFICATION RR-F-6210. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
 13. FRAME MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO RISER.
 14. INSTALL REMOVABLE APWA TYPE 604 TRAP OR EQUAL. SEE STD. PLAN D2.1.
 15. CONTRACTOR SHALL HAVE THE OPTION OF FURNISHING PRECAST OR CAST-IN-PLACE INLET STRUCTURES, UNLESS SPECIFIED.



- NOTES:
1. WELDING NOT PERMITTED
 2. USE VANED GRATE PER STD. PLAN D4.4 WHERE LONGITUDINAL SLOPE EXCEEDS 4%.
 3. WHEN BOLT DOWN GRATES ARE SPECIFIED, PROVIDE TWO SLOTS IN THE GRATE THAT ARE VERTICALLY ALIGNED WITH THE HOLES IN THE FRAME. LOCATION OF BOLT DOWN SLOTS VARIES AMONG DIFFERENT MANUFACTURERS.
 4. REFER TO WSDOT STANDARD SPECIFICATION 9-05.15(2) FOR ADDITIONAL REQUIREMENTS.
 5. FOR FRAME DETAIL, SEE STD. PLAN D4.2
 6. THE THICKNESS OF THE GRATE SHALL NOT EXCEED 1-5/8".



- NOTES:
1. WELDING NOT PERMITTED
 2. USE HERRINGBONE GRATE PER STD. PLAN D4.3 WHERE LONGITUDINAL SLOPE IS LESS THAN 4%.
 3. WHEN BOLT DOWN GRATES ARE SPECIFIED, PROVIDE TWO SLOTS IN THE GRATE THAT ARE VERTICALLY ALIGNED WITH THE HOLES IN THE FRAME. LOCATION OF BOLT DOWN SLOTS VARIES AMONG DIFFERENT MANUFACTURERS.
 4. REFER TO WSDOT STANDARD SPECIFICATION 9-05.15(2) FOR ADDITIONAL REQUIREMENTS.
 5. FOR FRAME DETAIL, SEE STD. PLAN D4.2

Department of Public Works
CLARK COUNTY
WASHINGTON

STANDARD MANHOLE FRAME AND COVER
APPROVED
a/o/04/04
DATE

STANDARD D1.6
PLAN NO.
REVISIONS
DATE

Department of Public Works
CLARK COUNTY
WASHINGTON

STANDARD CATCH BASIN TYPE 1
APPROVED
a/o/04/04
DATE

STANDARD D4.0
PLAN NO.
REVISIONS
DATE

Department of Public Works
CLARK COUNTY
WASHINGTON

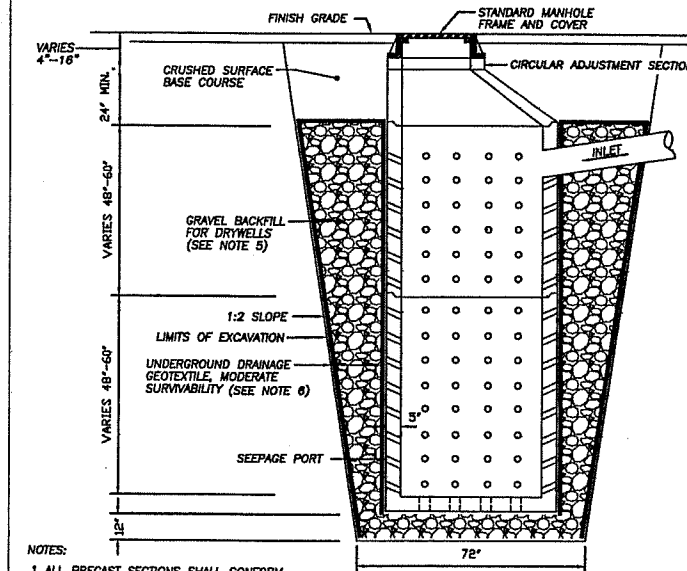
HERRINGBONE GRATE FOR CATCH BASIN
APPROVED
a/o/04/04
DATE

STANDARD D4.3
PLAN NO.
REVISIONS
DATE

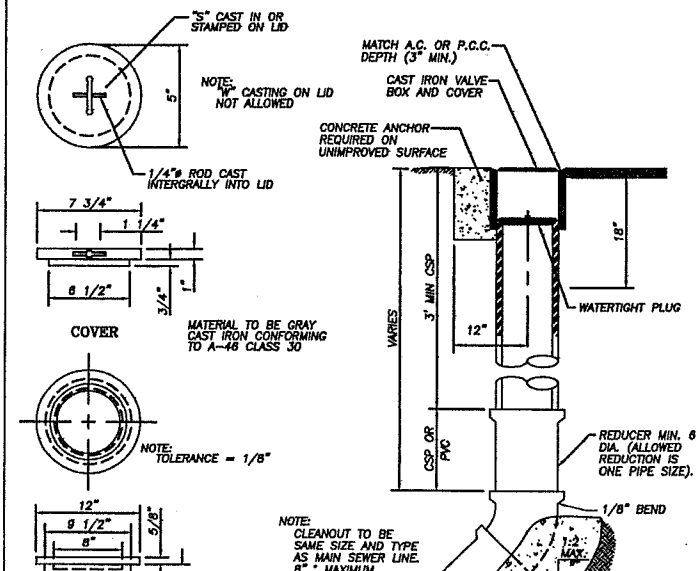
Department of Public Works
CLARK COUNTY
WASHINGTON

VANES GRATE FOR CATCH BASIN
APPROVED
a/o/04/04
DATE

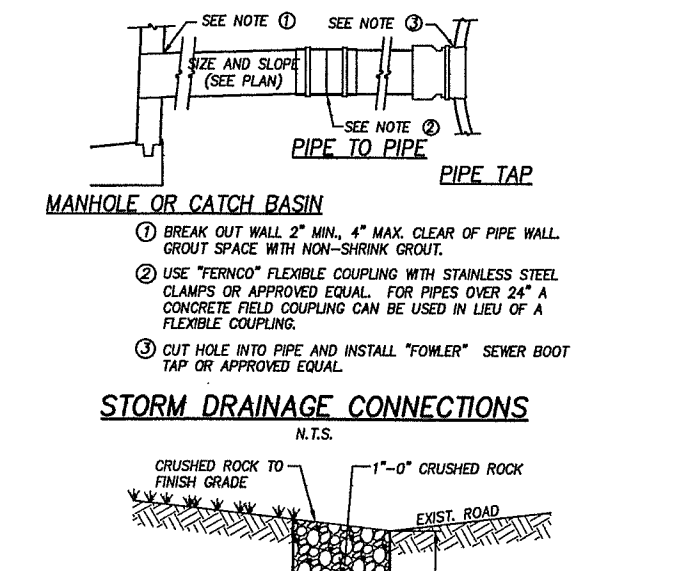
STANDARD D4.4
PLAN NO.
REVISIONS
DATE



- NOTES:
1. ALL PRECAST SECTIONS SHALL CONFORM TO REQUIREMENTS OF A.S.T.M. C478
 2. PRECAST CONE SECTIONS MAY BE ECCENTRIC OR CONCENTRIC.
 3. ALL PIPING TO AND FROM PRECAST DRYWELLS SHALL HAVE AT LEAST 8" OF CRUSHED ROCK COVER CONTINUOUSLY AROUND PIPE WHERE DRAIN ROCK WOULD OTHERWISE BE IN CONTACT WITH PIPE.
 4. PERFORATIONS SHALL BE HORIZONTAL ROWS OF (14) 2-1/4" SQUARE OR (14) 2-3/8" ROUND HOLES, EQUALLY SPACED. ROWS SHALL BE SPACED 6-1/2" CENTER TO CENTER.
 5. GRAVEL BACKFILL FOR DRYWELLS PER WDOT SPECIFICATION 9-03.12(5).
 6. UNDERGROUND DRAINAGE GEOTEXTILE, MODERATE SURVIVABILITY. SEE WDOT SPECIFICATION 9-33.
 7. TYPICAL DRYWELL DEPTH IS 13'



- NOTES:
1. CASTING ON LID NOT ALLOWED
 2. 1/4" ROD CAST INTERIALLY INTO LID
 3. MATERIAL TO BE GRAY CAST IRON CONFORMING TO A-48 CLASS 30
 4. NOTE: TOLERANCE = 1/8"
 5. CAST IRON VALVE BOX AND COVER NO. 910
 6. VALVE BOX SHALL BE PORT VANCOUVER PATTERN NO. 910 CAST IRON OR APPROVED EQUAL



- NOTES:
1. BREAK OUT WALL 2" MIN., 4" MAX. CLEAR OF PIPE WALL. GROUT SPACE WITH NON-SHRINK GROUT.
 2. USE "FERRO" FLEXIBLE COUPLING WITH STAINLESS STEEL CLAMPS OR APPROVED EQUAL. FOR PIPES OVER 24" A CONCRETE FIELD COUPLING CAN BE USED IN LIEU OF A FLEXIBLE COUPLING.
 3. CUT HOLE INTO PIPE AND INSTALL "FOWLER" SEWER BOOT TAP OR APPROVED EQUAL.

Department of Public Works
CLARK COUNTY
WASHINGTON

PRECAST DRYWELL
APPROVED
a/o/04/04
DATE

STANDARD D10
PLAN NO.
REVISIONS
DATE

Department of Public Works
CLARK COUNTY
WASHINGTON

STANDARD CLEANOUT
APPROVED
a/o/04/04
DATE

STANDARD D15
PLAN NO.
REVISIONS
DATE

Department of Public Works
CLARK COUNTY
WASHINGTON

STANDARD CLEANOUT
APPROVED
a/o/04/04
DATE

STANDARD D15
PLAN NO.
REVISIONS
DATE

Department of Public Works
CLARK COUNTY
WASHINGTON

STANDARD CLEANOUT
APPROVED
a/o/04/04
DATE

STANDARD D15
PLAN NO.
REVISIONS
DATE

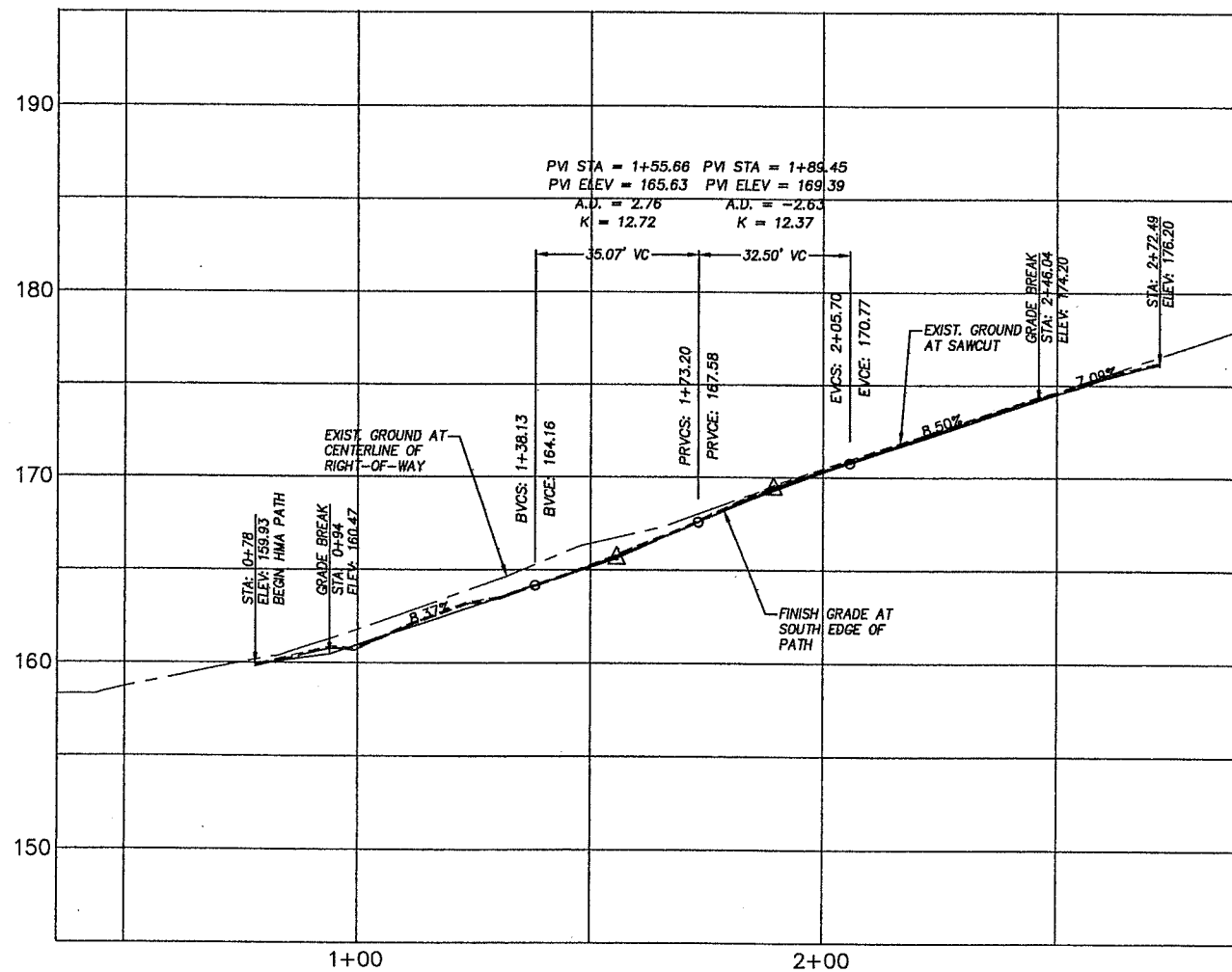
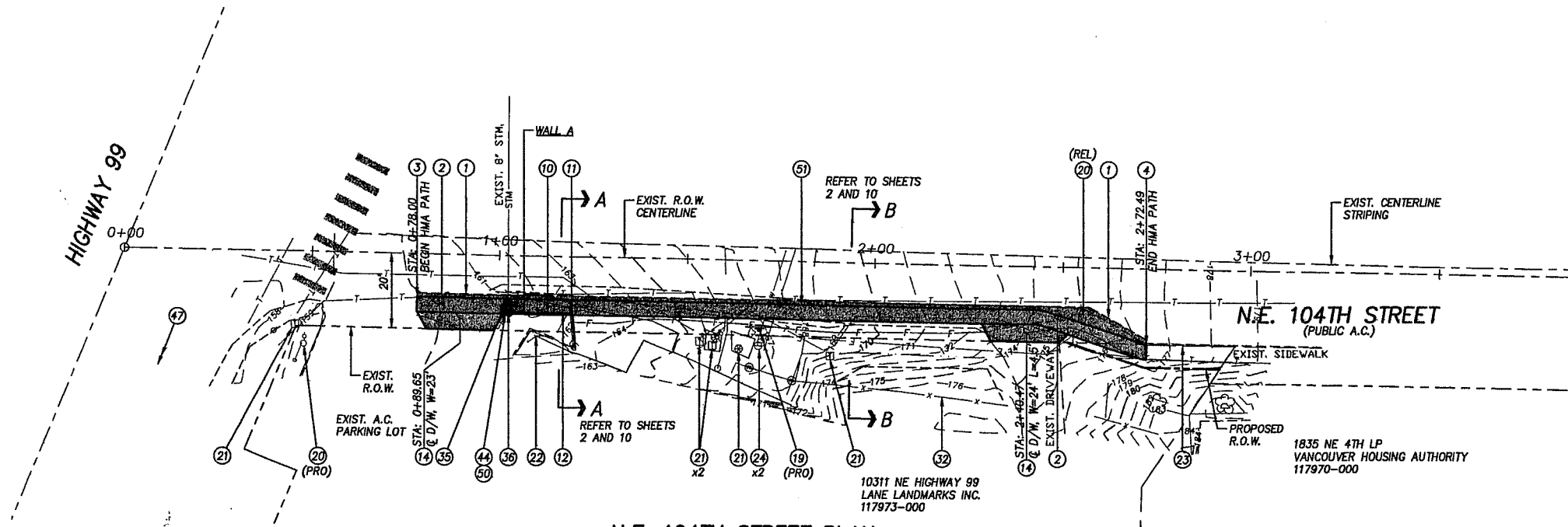
DESIGNED: S.J./CLH
DRAWN: S.J./CLH
CRP: 1-800-553-4344
HOR: 1"-20'
VERT: 1/8"=1'-0"
DATE: 6/24/05
DWG: NOTIFICATION CENTER
SHEET 6 OF 10

CALL 48 HOURS BEFORE YOU DIG

Harper Houf Peterson
Righellis Inc.
1104 MAIN STREET, SUITE 100, VANCOUVER, WA 98660
TEL 360.750.1131 FAX 360.750.1141

ENGINEERING PROGRAM
DESIGN SECTION
SARAH J. ANDERSON ELEMENTARY
PEDESTRIAN PROJECT

prond post, promising future
CLARK COUNTY
WASHINGTON

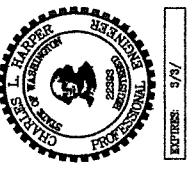
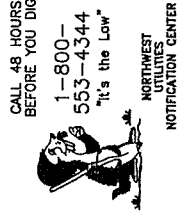


LEGEND	
EXISTING	
---	EDGE OF PAVEMENT
---	PROPERTY LINE
---	72' 1' CONTOUR
✱	TREES
⊠	TELEPHONE LINE
⊠	UTILITY OR ENCLOSURE RISER
⊠	GAS LINE
⊠	GAS METER
⊠	WATER LINE
⊠	WATER METER
⊠	STORM LINE
⊠	CATCH BASIN
⊠	COMBINATION CURB INLET
⊠	SANITARY LINE
⊠	SANITARY MANHOLE
⊠	SANITARY CLEANOUT
⊠	UTILITY POLE & GUY WIRE
⊠	MAILBOX
⊠	FENCE
PROPOSED	
---	CUT LIMITS
---	FILL LIMITS
---	STORM LINE
⊠	STORM MANHOLE
⊠	CATCH BASIN/AREA DRAIN
---	DITCH CENTERLINE
⊠	EROSION CONTROL DITCH PROTECTION
⊠	EROSION CONTROL CATCH BASIN/INLET PROTECTION
⊠	RETAINING WALL
⊠	HMA PATHWAY
⊠	CONCRETE
⊠	GRAVEL

CONSTRUCTION NOTES:

- ① SAWCUT EXIST. ASPHALT OR CONCRETE AS SHOWN.
- ② CONSTRUCT HMA PEDESTRIAN PATH PER PLAN. SEE SHEET 2 OF 10 FOR TYPICAL SECTION.
- ③ MATCH NEW HMA PATH TO EXIST. ASPHALT. PROVIDE SAND SEAL AT CONNECTION POINT.
- ④ MATCH NEW HMA PATH TO EXIST. CONCRETE SIDEWALK.
- ⑩ CONSTRUCT CAST IN PLACE CONCRETE RETAINING WALL PER DETAIL ON SHEET 5 OF 10.
- ⑪ SAWCUT EXIST. CONCRETE RETAINING WALL AND MATCH EXISTING WALL ELEVATIONS AT CONNECTION POINT. PLACE NON-SHRINK GROUT IN WALL SEAM.
- ⑭ CONSTRUCT HMA DRIVEWAY TRANSITION. SEE SHEET 5 OF 10 FOR DETAIL AND STRUCTURAL SECTION.
- ⑲ PROTECT (PRO), RELOCATE (REL) EXISTING SIGN.
- ⑳ PROTECT (PRO), RELOCATE (REL) EXISTING UTILITY POLE. COORDINATE WITH UTILITY PRIOR TO CONSTRUCTION.
- ㉑ PROTECT EXISTING UTILITY RISER, TRANSFORMER OR PEDESTAL. COORDINATE WITH UTILITY PRIOR TO CONSTRUCTION.
- ㉒ PROTECT EXISTING STRUCTURE.
- ㉓ PROTECT EXISTING CURB AND OR SIDEWALK.
- ㉔ PROTECT EXISTING WATER METER AND ADJUST TO FINISH GRADE AS NECESSARY.
- ㉕ PROTECT EXISTING FENCE.
- ㉖ REMOVE EXIST. AREA DRAIN.
- ㉗ INSTALL STANDARD TYPE 1 CATCH BASIN WITH VANE GRATE AND CONNECT TO EXIST. 6" STORM PIPE FROM NORTH. SEE SHEET 6 OF 10 FOR DETAILS.
- ㉘ PROVIDE INLET PROTECTION PER DETAIL ON SHEET 4 OF 10.
- ㉙ INSTALL STORM INLET PROTECTION ON
- ㉚ INSTALL 4" STORM PIPE, CONNECT TO RETAINING WALL FOUNDATION DRAIN WITH MIN. SLOPE = 0.0200.
- ㉛ INSTALL PAINTED 8" WIDE, WHITE LANE LINE STRIPING.

DESIGNED: SUN/CLH
DRAWN: SUN/TLH
CRP: 1-800-553-4344
HOR. 1"=20'
VERT. 1"=5'
DATE: 6/24/05
DWG: NORTHWEST UTILITIES NOTIFICATION CENTER
SHEET 7 OF 10

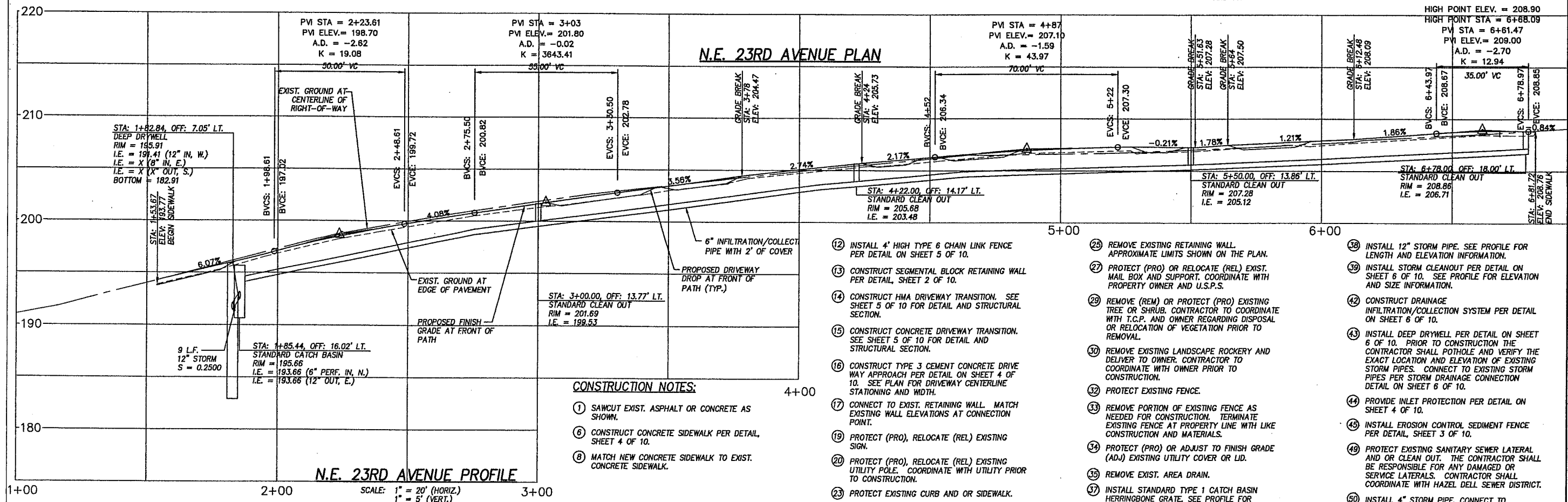
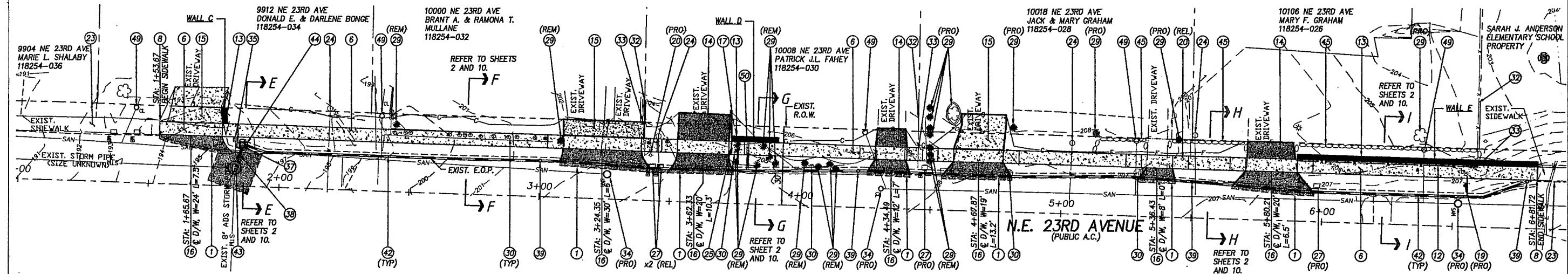
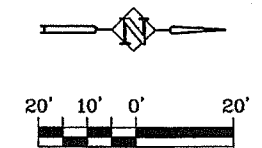


Harper Houf Peterson
Righellis Inc.
ENGINEERS, PLANNERS, SURVEYORS
1104 Main Street, Suite 100, Vancouver, WA 98660
TEL 360.750.1131 www.hhp.com WA 360.750.1141

ENGINEERING PROGRAM
DESIGN SECTION
SARAH J. ANDERSON ELEMENTARY
PEDESTRIAN PROJECT

CLARK COUNTY
WASHINGTON
proud past, promising future

LEGEND	
EXISTING	PROPOSED
— — — — —	— — — — —
EDGE OF PAVEMENT	CUT LIMITS
PROPERTY LINE	FILL LIMITS
— 72 —	— — — — —
1' CONTOUR	STORM LINE
✱ ✱ ✱	INFILTRATION/COLLECTION LINE
TREES	STORM DRYWELL
— — — — —	CATCH BASIN/AREA DRAIN
TELEPHONE LINE	DITCH CENTERLINE
UTILITY OR ENCLOSURE RISER	EROSION CONTROL DITCH
— — — — —	PROTECTION
GAS LINE	EROSION CONTROL CATCH
— — — — —	BASIN/INLET PROTECTION
GAS METER	RETAINING WALL
— — — — —	— — — — —
WATER LINE	HMA PATHWAY
— — — — —	CONCRETE
WATER METER	GRAVEL
— — — — —	— — — — —
STORM LINE	— — — — —
— — — — —	— — — — —
CATCH BASIN	— — — — —
COMBINATION CURB INLET	— — — — —
SANITARY LINE	— — — — —
— — — — —	— — — — —
SANITARY MANHOLE	— — — — —
— — — — —	— — — — —
SANITARY CLEANOUT	— — — — —
UTILITY POLE & GUY WIRE	— — — — —
MAILBOX	— — — — —
— — — — —	— — — — —
FENCE	— — — — —



CONSTRUCTION NOTES:

- 1 SAWCUT EXIST. ASPHALT OR CONCRETE AS SHOWN.
- 6 CONSTRUCT CONCRETE SIDEWALK PER DETAIL SHEET 4 OF 10.
- 8 MATCH NEW CONCRETE SIDEWALK TO EXIST. CONCRETE SIDEWALK.
- 12 INSTALL 4' HIGH TYPE 6 CHAIN LINK FENCE PER DETAIL ON SHEET 5 OF 10.
- 13 CONSTRUCT SEGMENTAL BLOCK RETAINING WALL PER DETAIL SHEET 2 OF 10.
- 14 CONSTRUCT HMA DRIVEWAY TRANSITION. SEE SHEET 5 OF 10 FOR DETAIL AND STRUCTURAL SECTION.
- 15 CONSTRUCT CONCRETE DRIVEWAY TRANSITION. SEE SHEET 5 OF 10 FOR DETAIL AND STRUCTURAL SECTION.
- 16 CONSTRUCT TYPE 3 CEMENT CONCRETE DRIVEWAY APPROACH PER DETAIL ON SHEET 4 OF 10. SEE PLAN FOR DRIVEWAY CENTERLINE STATIONING AND WIDTH.
- 17 CONNECT TO EXIST. RETAINING WALL. MATCH EXISTING WALL ELEVATIONS AT CONNECTION POINT.
- 19 PROTECT (PRO), RELOCATE (REL) EXISTING SIGN.
- 20 PROTECT (PRO), RELOCATE (REL) EXISTING UTILITY POLE. COORDINATE WITH UTILITY PRIOR TO CONSTRUCTION.
- 23 PROTECT EXISTING CURB AND/OR SIDEWALK.
- 24 PROTECT EXISTING WATER METER AND ADJUST TO FINISH GRADE AS NECESSARY.
- 25 REMOVE EXISTING RETAINING WALL. APPROXIMATE LIMITS SHOWN ON THE PLAN.
- 27 PROTECT (PRO) OR RELOCATE (REL) EXIST. MAIL BOX AND SUPPORT. COORDINATE WITH PROPERTY OWNER AND U.S.P.S.
- 29 REMOVE (REM) OR PROTECT (PRO) EXISTING TREE OR SHRUB. CONTRACTOR TO COORDINATE WITH T.C.P. AND OWNER REGARDING DISPOSAL OR RELOCATION OF VEGETATION PRIOR TO REMOVAL.
- 30 REMOVE EXISTING LANDSCAPE ROCKERY AND DELIVER TO OWNER. CONTRACTOR TO COORDINATE WITH OWNER PRIOR TO CONSTRUCTION.
- 32 PROTECT EXISTING FENCE.
- 33 REMOVE PORTION OF EXISTING FENCE AS NEEDED FOR CONSTRUCTION. TERMINATE EXISTING FENCE AT PROPERTY LINE WITH LIKE CONSTRUCTION AND MATERIALS.
- 34 PROTECT (PRO) OR ADJUST TO FINISH GRADE (ADJ) EXISTING UTILITY COVER OR LID.
- 35 REMOVE EXIST. AREA DRAIN.
- 37 INSTALL STANDARD TYPE 1 CATCH BASIN HERRINGBONE GRATE. SEE PROFILE FOR ELEVATION INFORMATION. SEE SHEET 6 OF 10 FOR DETAILS.
- 38 INSTALL 12" STORM PIPE. SEE PROFILE FOR LENGTH AND ELEVATION INFORMATION.
- 39 INSTALL STORM CLEANOUT PER DETAIL ON SHEET 6 OF 10. SEE PROFILE FOR ELEVATION AND SIZE INFORMATION.
- 42 CONSTRUCT DRAINAGE INFILTRATION/COLLECTION SYSTEM PER DETAIL ON SHEET 6 OF 10.
- 43 INSTALL DEEP DRYWELL PER DETAIL ON SHEET 6 OF 10. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL POthOLE AND VERIFY THE EXACT LOCATION AND ELEVATION OF EXISTING STORM PIPES. CONNECT TO EXISTING STORM PIPES PER STORM DRAINAGE CONNECTION DETAIL ON SHEET 6 OF 10.
- 44 PROVIDE INLET PROTECTION PER DETAIL ON SHEET 4 OF 10.
- 45 INSTALL EROSION CONTROL SEDIMENT FENCE PER DETAIL, SHEET 3 OF 10.
- 49 PROTECT EXISTING SANITARY SEWER LATERAL AND/OR CLEAN OUT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGED OR SERVICE LATERALS. CONTRACTOR SHALL COORDINATE WITH HAZEL DELL SEWER DISTRICT.
- 50 INSTALL 4" STORM PIPE, CONNECT TO RETAINING WALL FOUNDATION DRAIN WITH MIN. SLOPE = 0.0200.

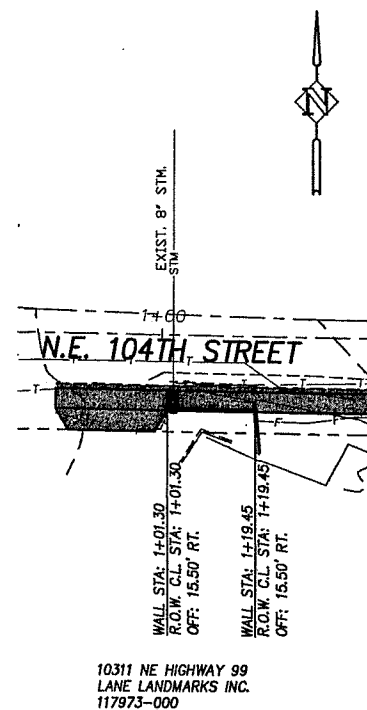
DESIGNED: SJC/CLH
 DRAWN: SJC/TLH
 CRP: 1-800-553-4344
 HOR: 1"=20'
 VERT: 1"=5'
 DATE: 6/24/05
 DWG: NORTHWEST UTILITIES
 SHEET 9 OF 10

CALL AS SHOWN BEFORE YOU DIG
 1-800-553-4344
 "It's the Law"
 NORTHWEST UTILITIES
 NOTIFICATION CENTER

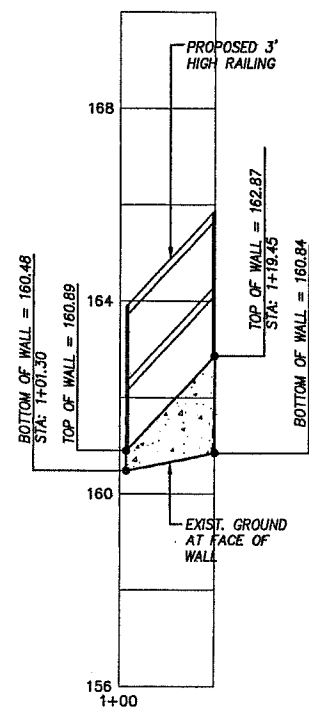
Harper Houf Peterson
Righellis Inc.
 ENGINEERS, PLANNERS, SURVEYORS
 1104 MAIN STREET, SUITE 100, VANCOUVER, WA 98660
 TEL: 360.750.1131 FAX: 360.750.1141
 WWW.HHPRI.COM

ENGINEERING PROGRAM
DESIGN SECTION
SARAH J. ANDERSON ELEMENTARY
PEDESTRIAN PROJECT

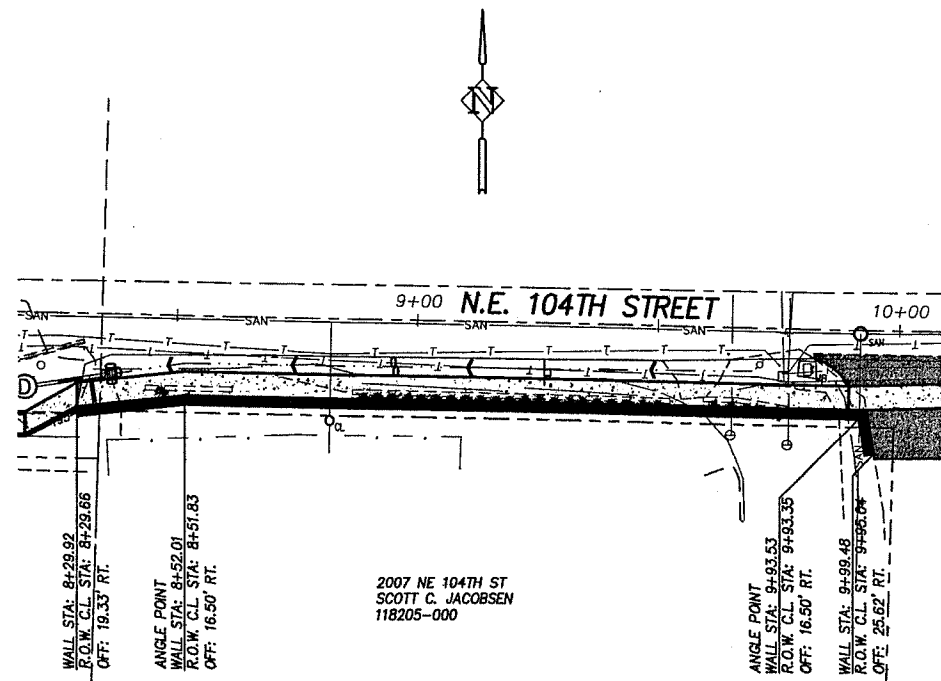
proud past, promising future
CLARK COUNTY
 WASHINGTON



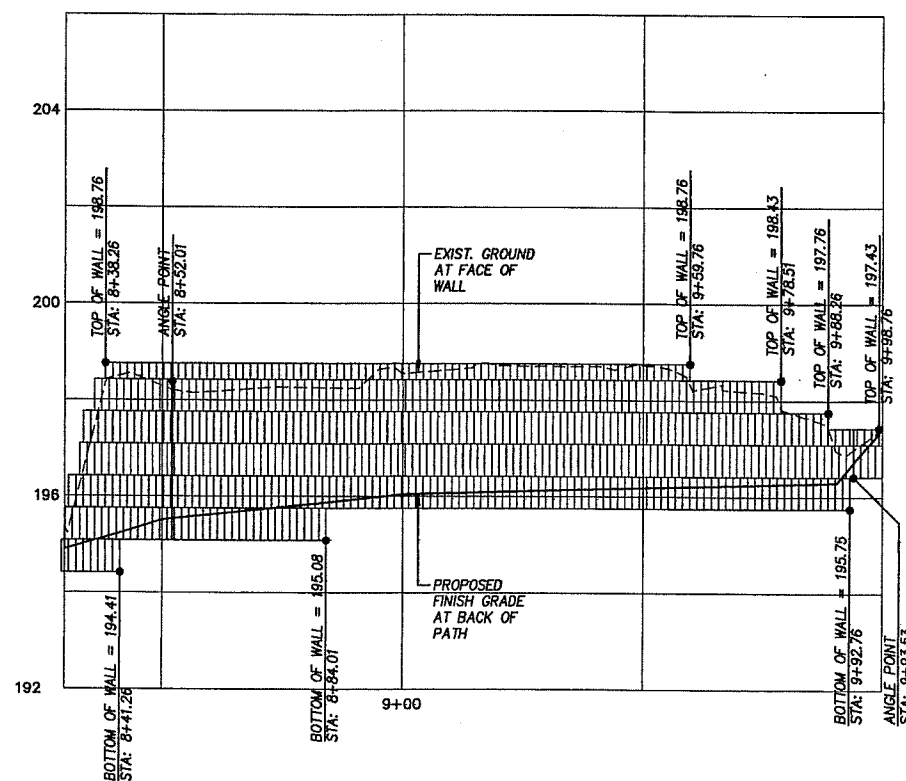
WALL "A" PLAN



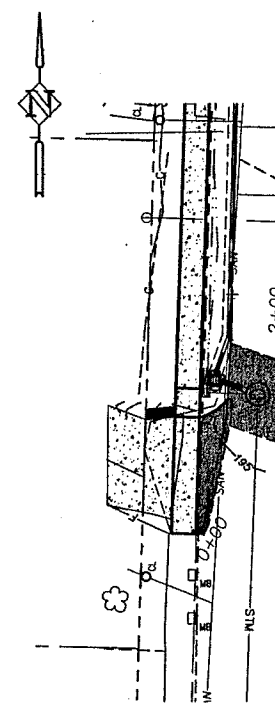
WALL "A" PROFILE
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



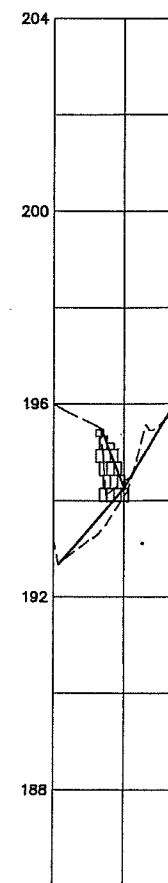
WALL "B" PLAN



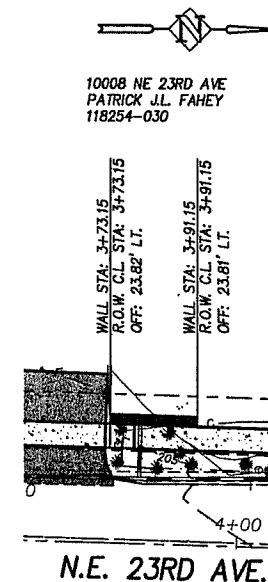
WALL "B" PROFILE
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



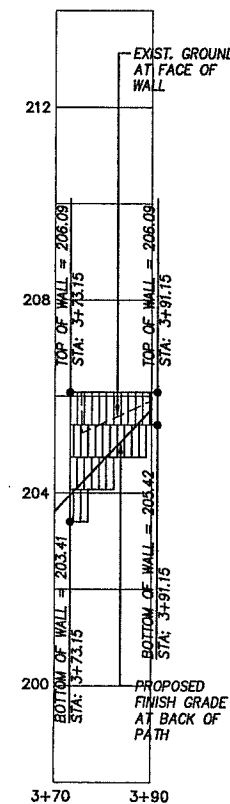
WALL "C" PLAN



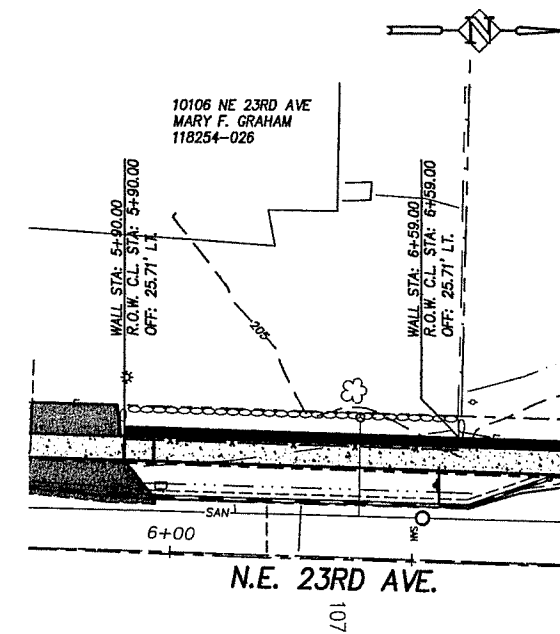
WALL "C" PROFILE
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



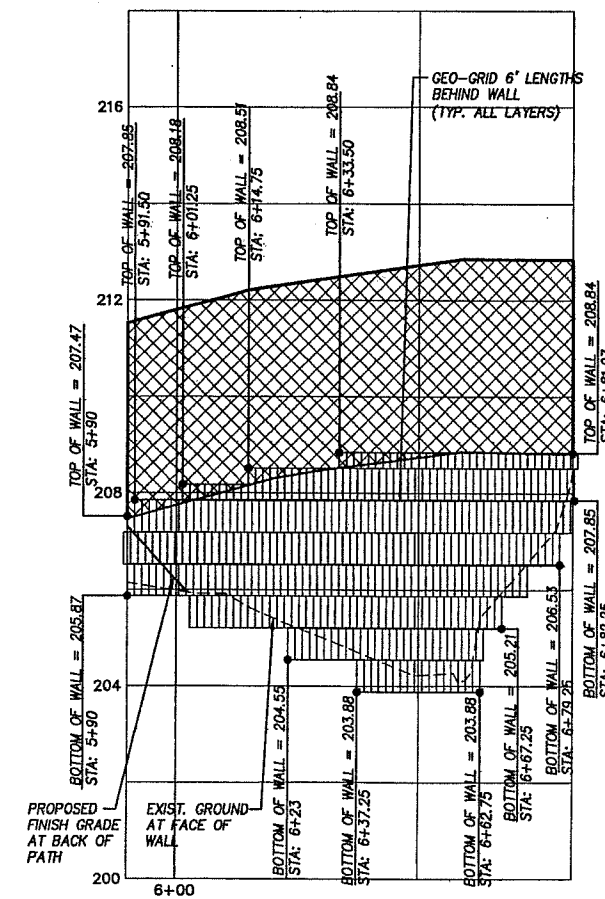
WALL "D" PLAN



WALL "D" PROFILE
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



WALL "E" PLAN



WALL "E" PROFILE
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)

DESIGNED: SUN/CLH
DRAWN: SUN/TLH
CRP: 1-800-553-4344
HOR: 1"=20'
VERT: 1"=2'
DATE: 6/24/05
DWG: NORTHWEST UTILITIES NOTIFICATION CENTER
SHEET 10 OF 10

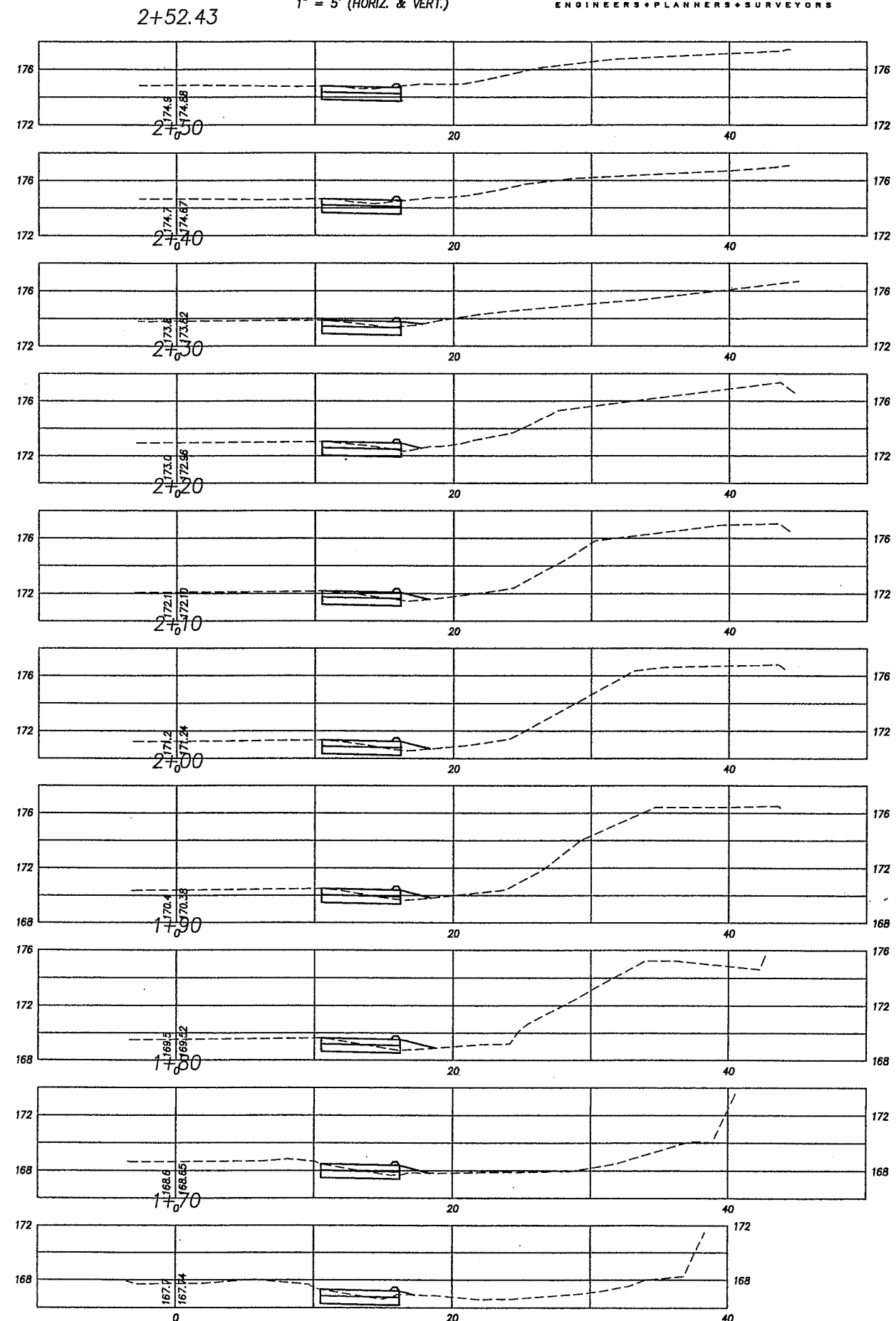
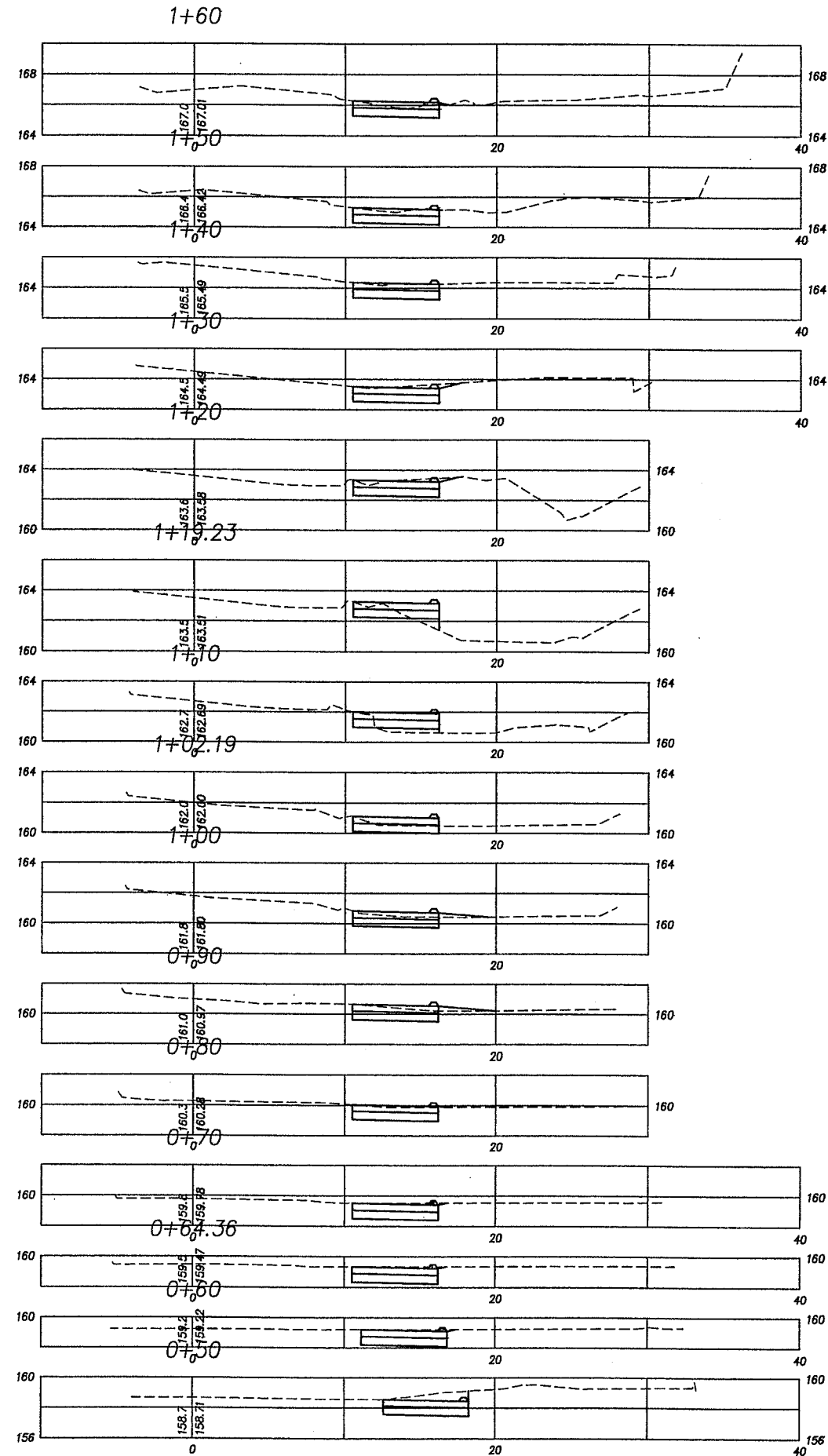
Harper Houf Peterson
Righellis Inc.
1104 Main Street, Suite 100, Vancouver, WA 98660
TEL: 360.750.1131 www.hhp.com FAX: 360.750.1141

ENGINEERING PROGRAM
DESIGN SECTION

SARAH J. ANDERSON ELEMENTARY
PEDESTRIAN PROJECT

proud past, promising future
CLARK COUNTY
WASHINGTON

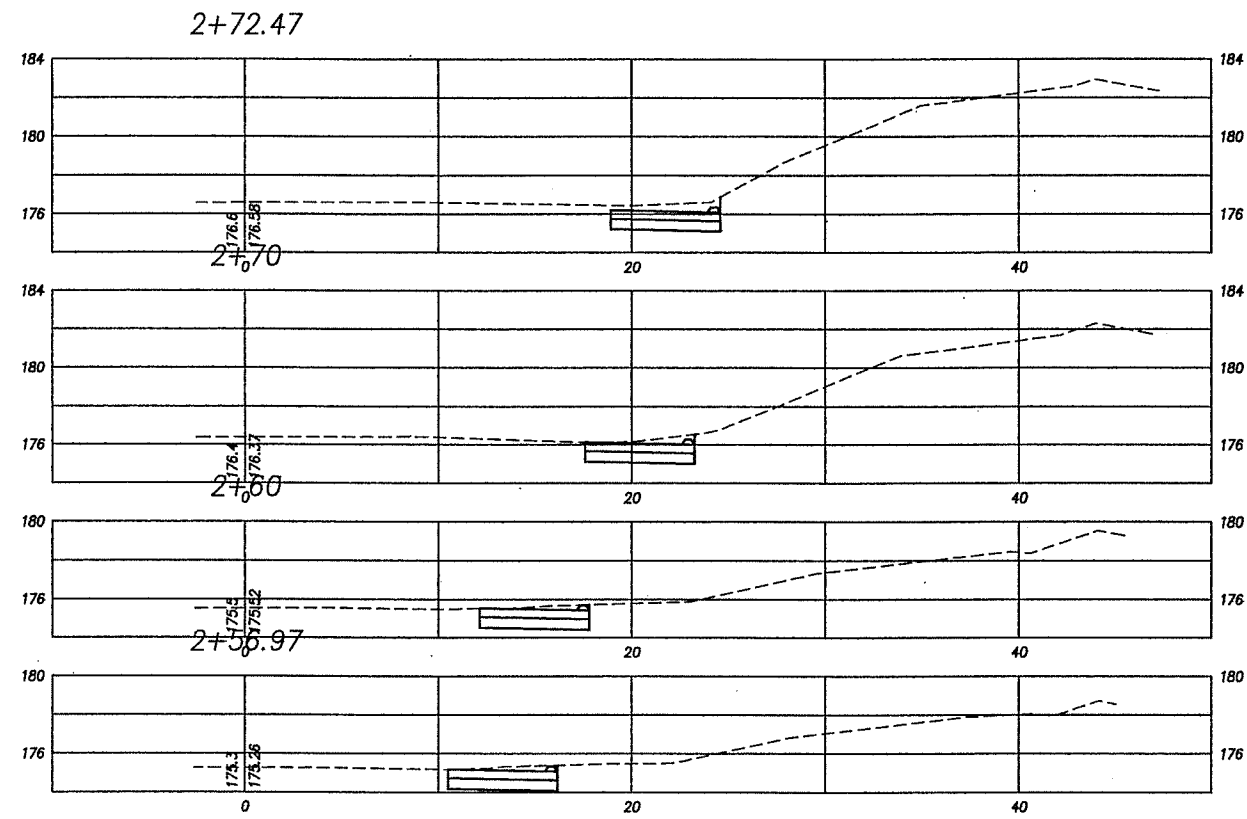
NE. 104TH ST. NEAR HWY 99
1" = 5' (HORIZ. & VERT.)



N.E. 104TH ST. NEAR HWY 99
1" = 5' (HORIZ. & VERT.)



Harper
Houf Peterson
Righellis Inc.
ENGINEERS • PLANNERS • SURVEYORS

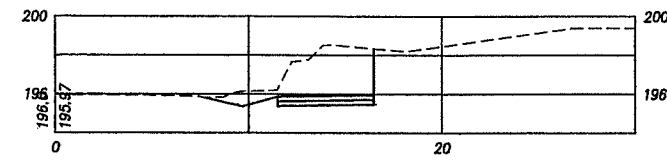


N.E. 104TH ST. NEAR
SARAH J. ANDERSON
SCALE: 1" = 5' (HORIZ. & VERT.)

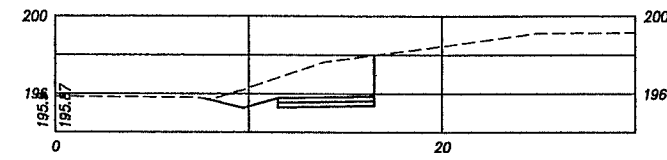


Harper
Houf Peterson
Righellis Inc.

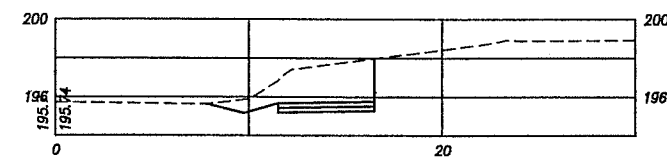
8+90



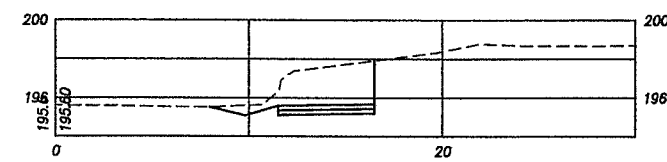
8+80



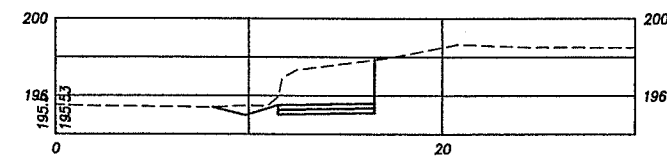
8+70



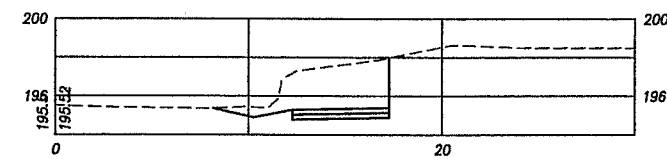
8+60



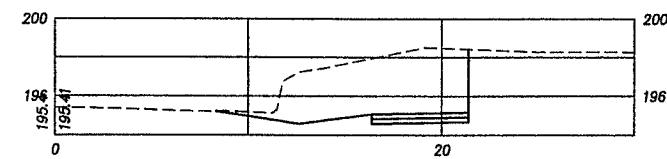
8+51.85



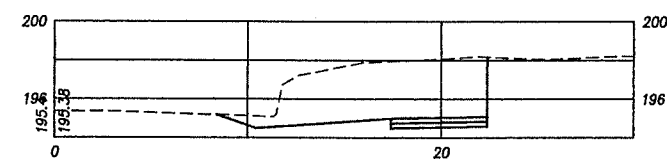
8+50



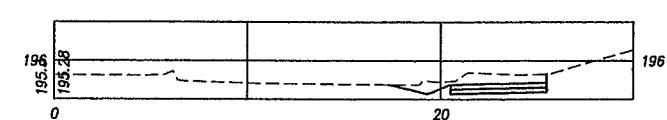
8+40



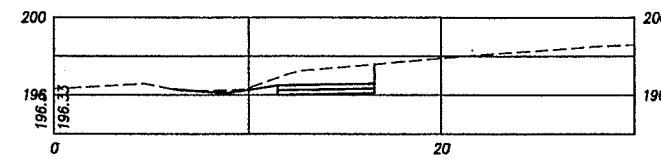
8+37.54



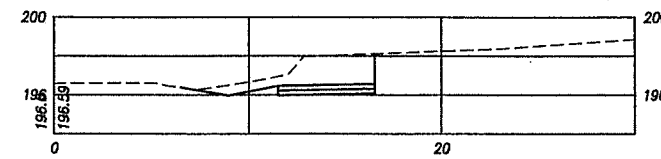
8+30



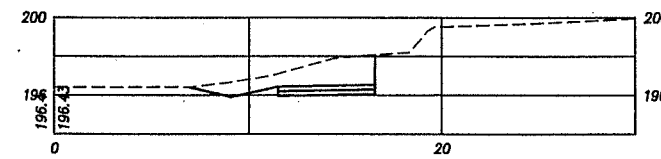
9+80



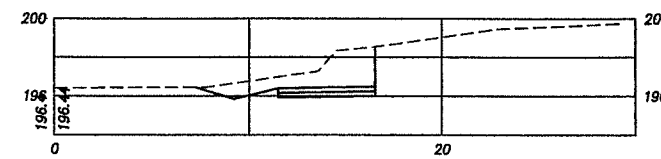
9+70



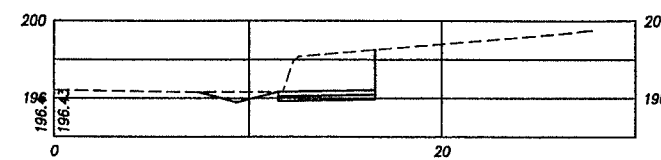
9+60



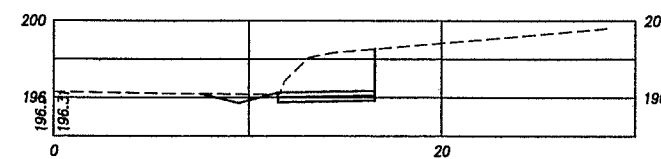
9+50



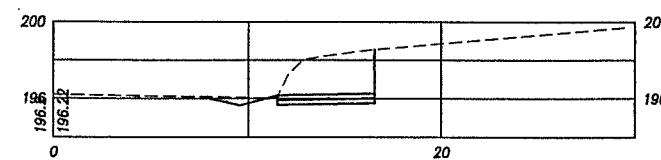
9+40



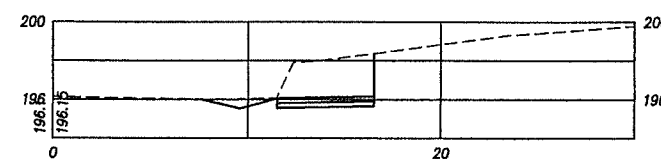
9+30



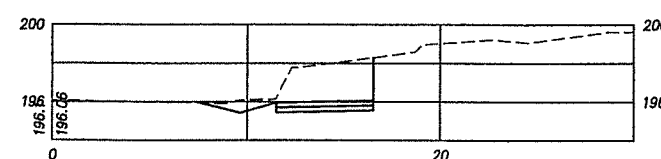
9+20



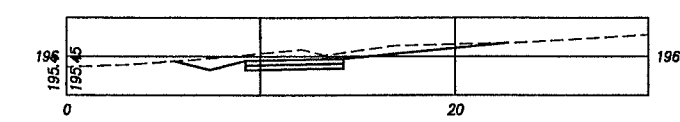
9+10



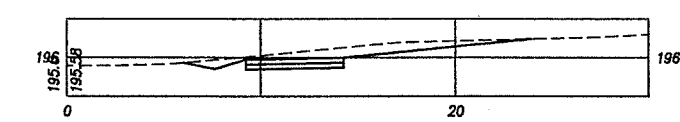
9+00



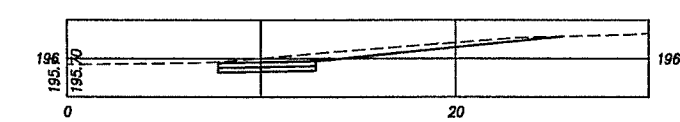
10+70



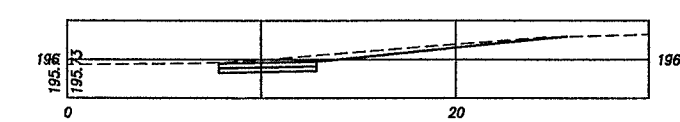
10+60



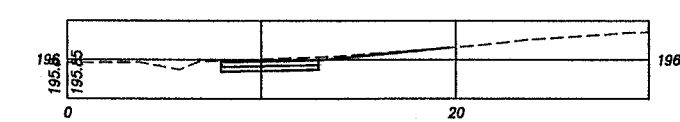
10+52



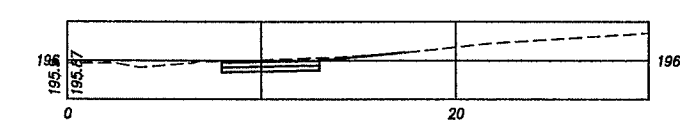
10+50



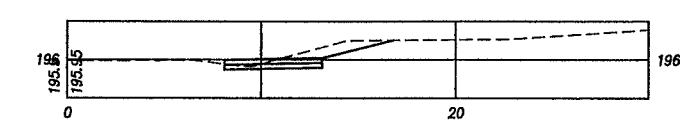
10+42.45



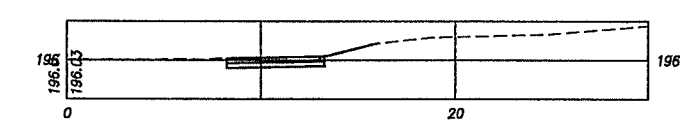
10+40



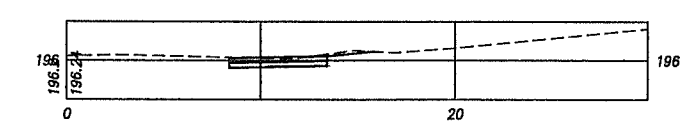
10+30



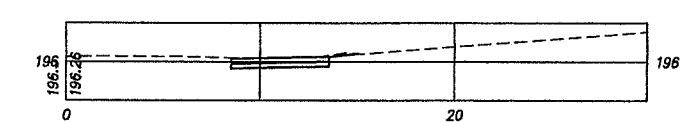
10+20



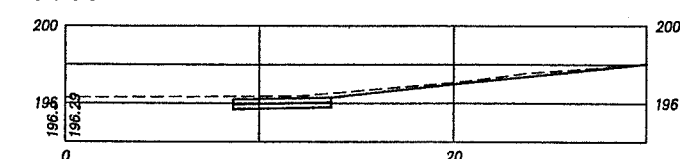
10+10



10+00



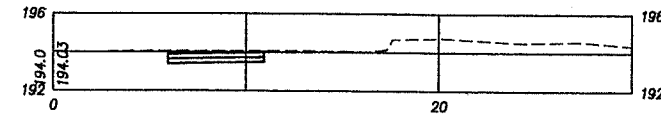
9+90



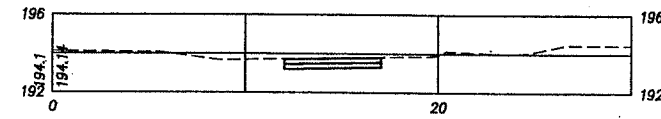
N.E. 104TH ST. NEAR
SARAH J. ANDERSON
SCALE: 1" = 5' (HORIZ. & VERT.)



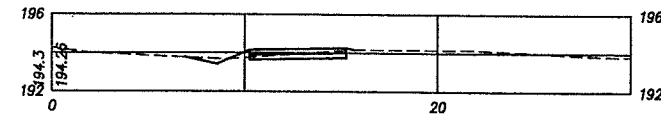
11+70



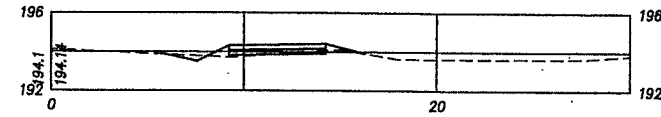
11+60



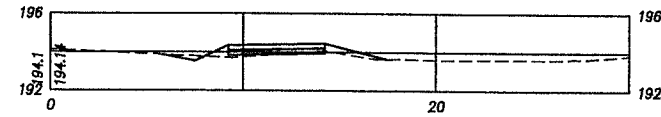
11+50



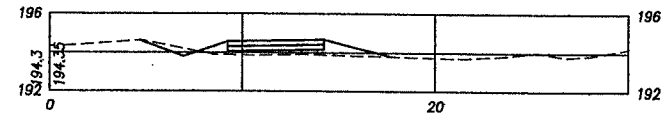
11+41.19



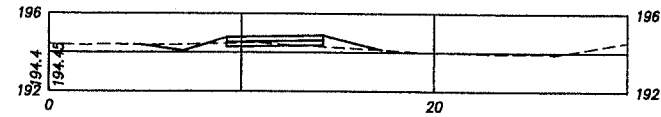
11+40



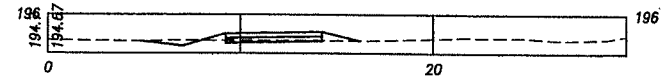
11+30



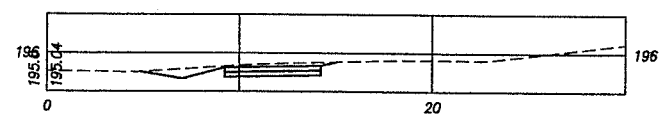
11+20



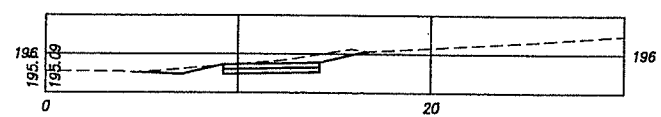
11+10



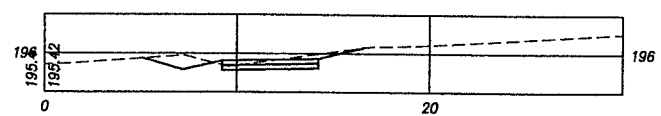
11+00



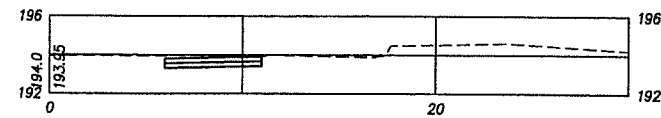
10+90



10+80



11+80



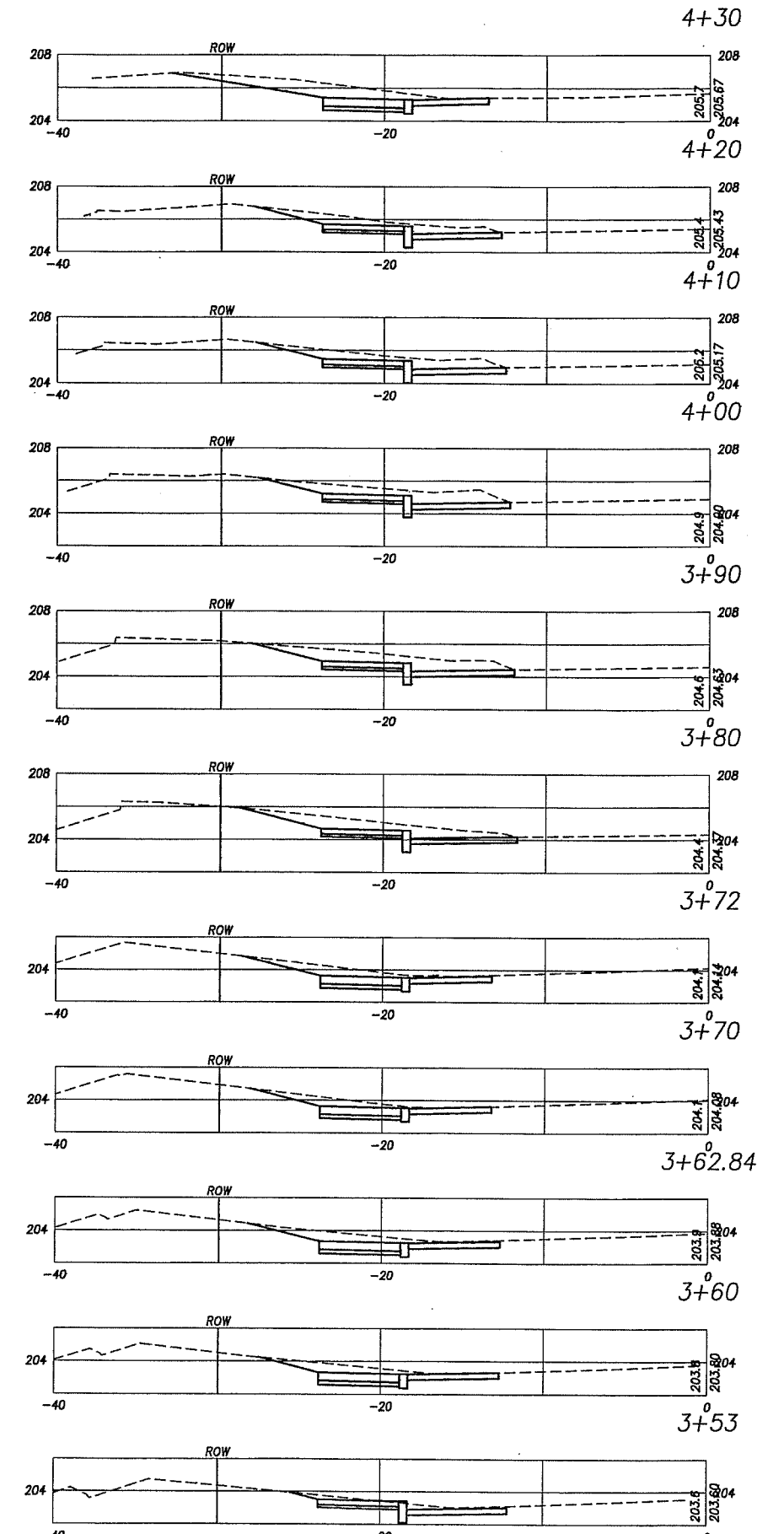
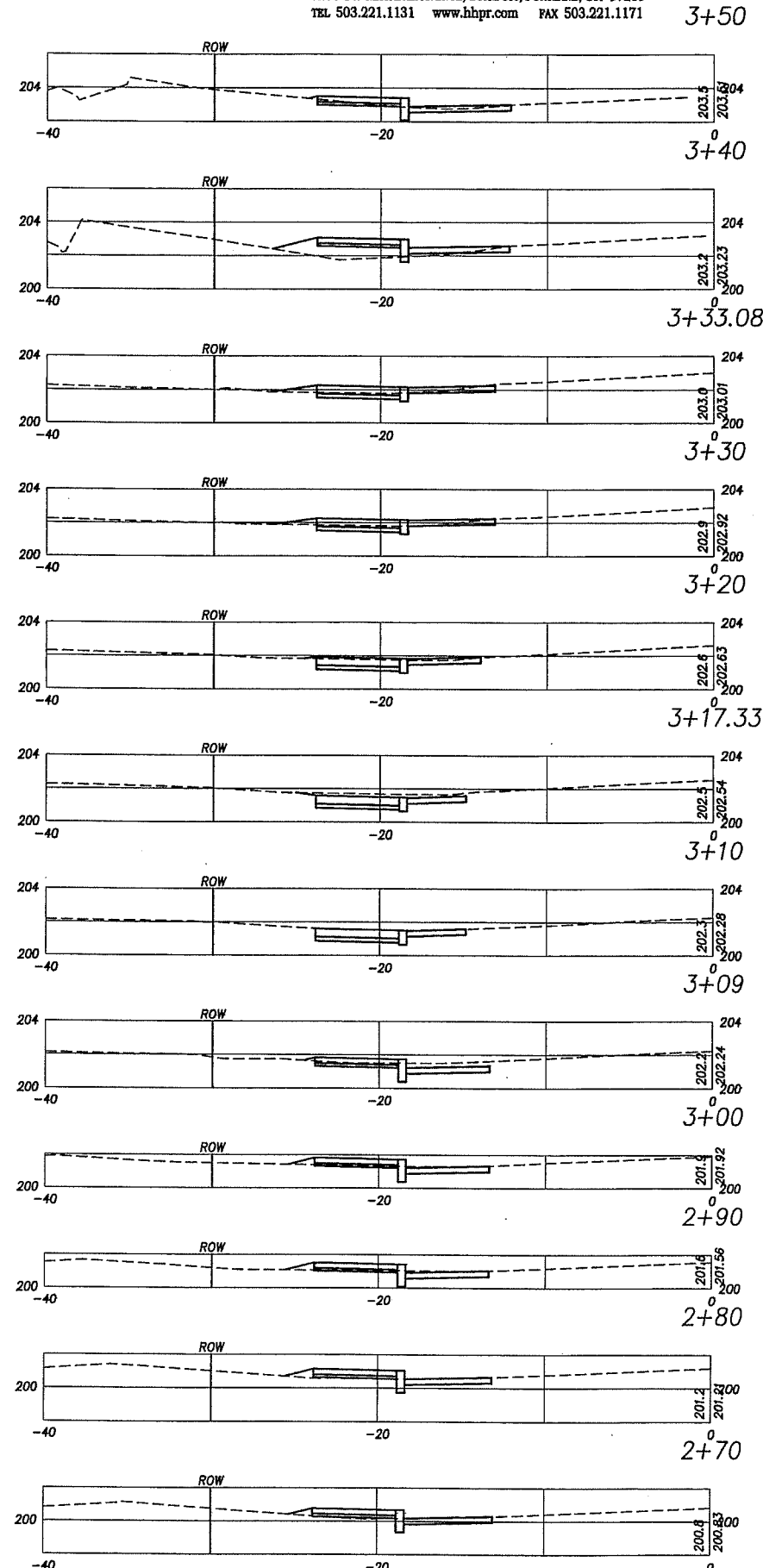
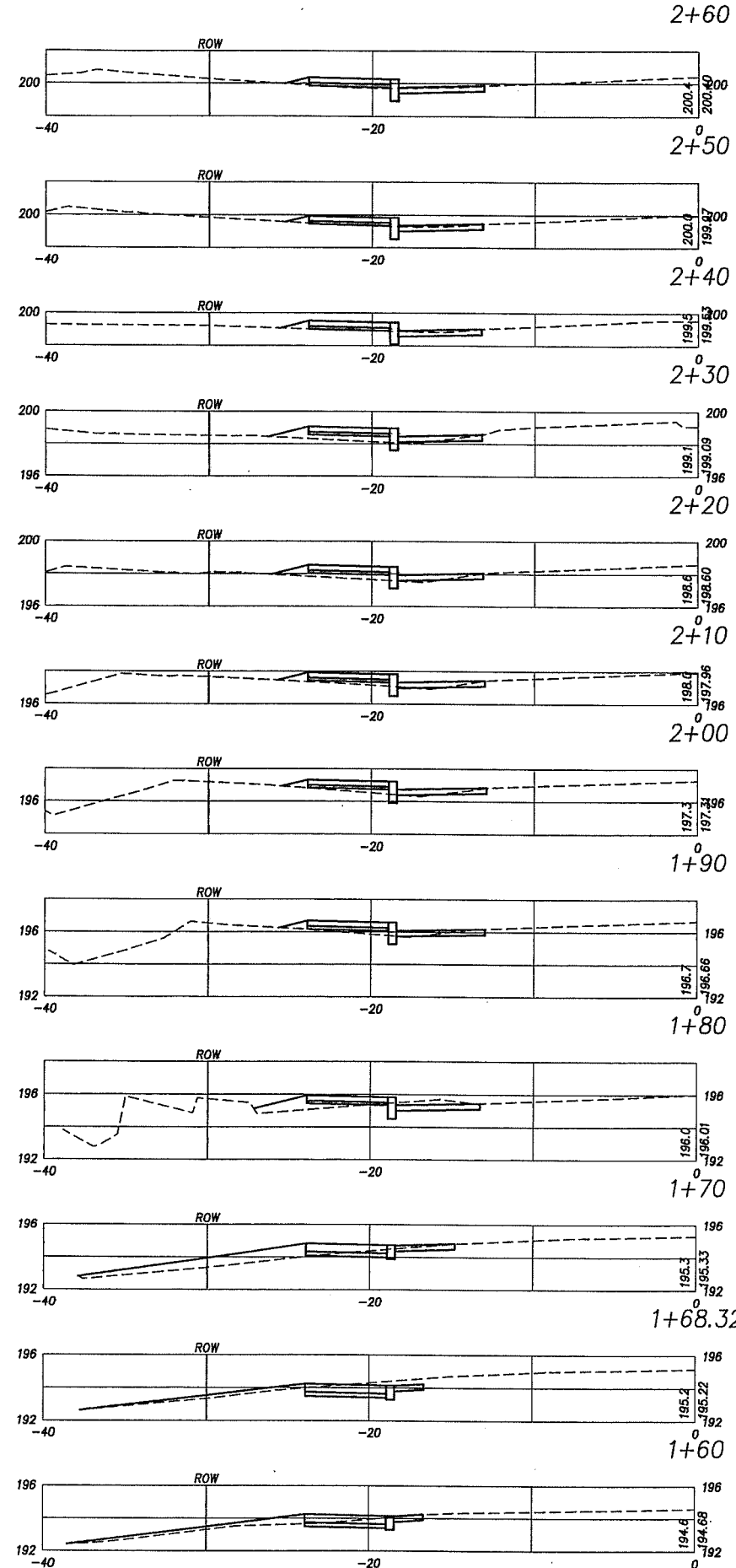
N.E. 23RD AVENUE

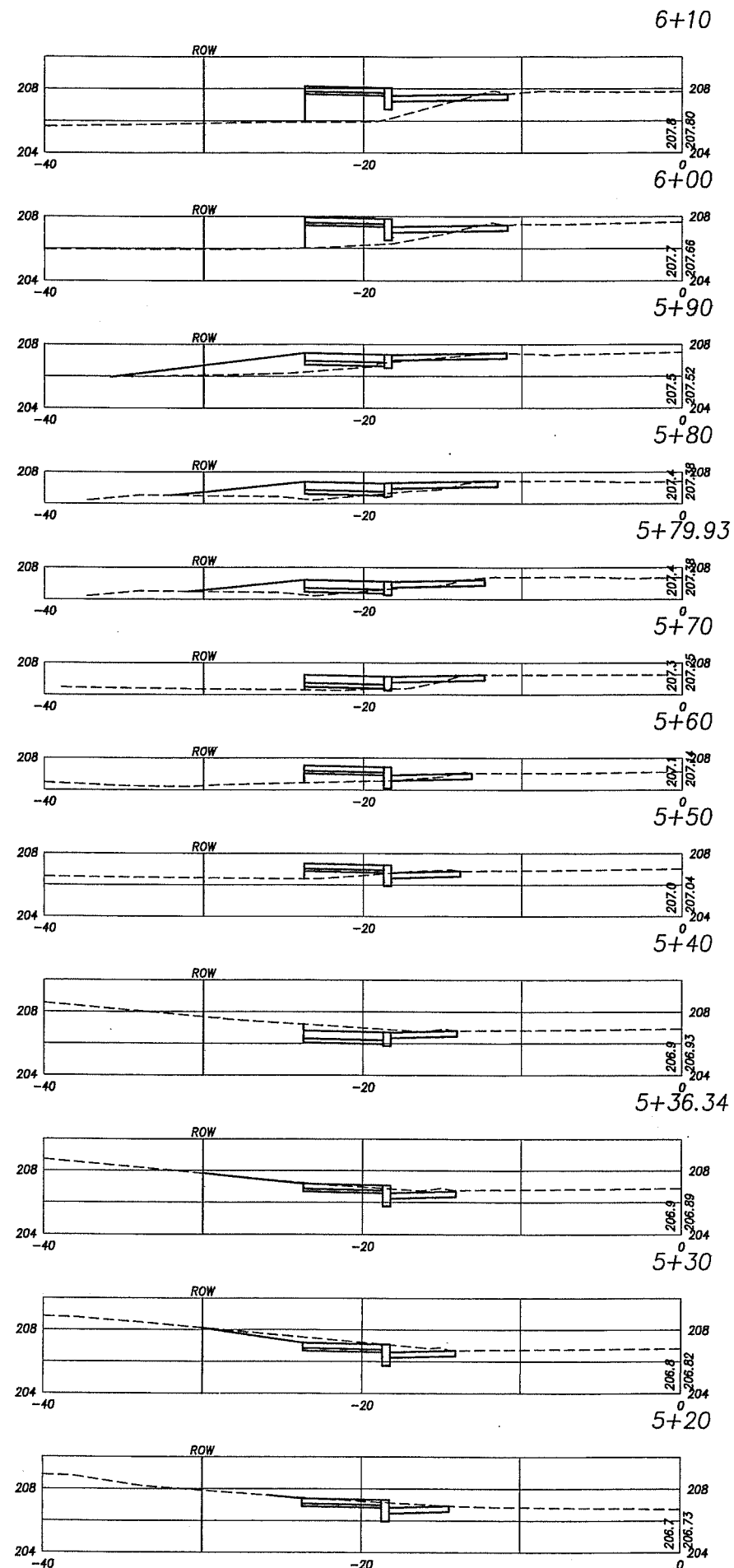
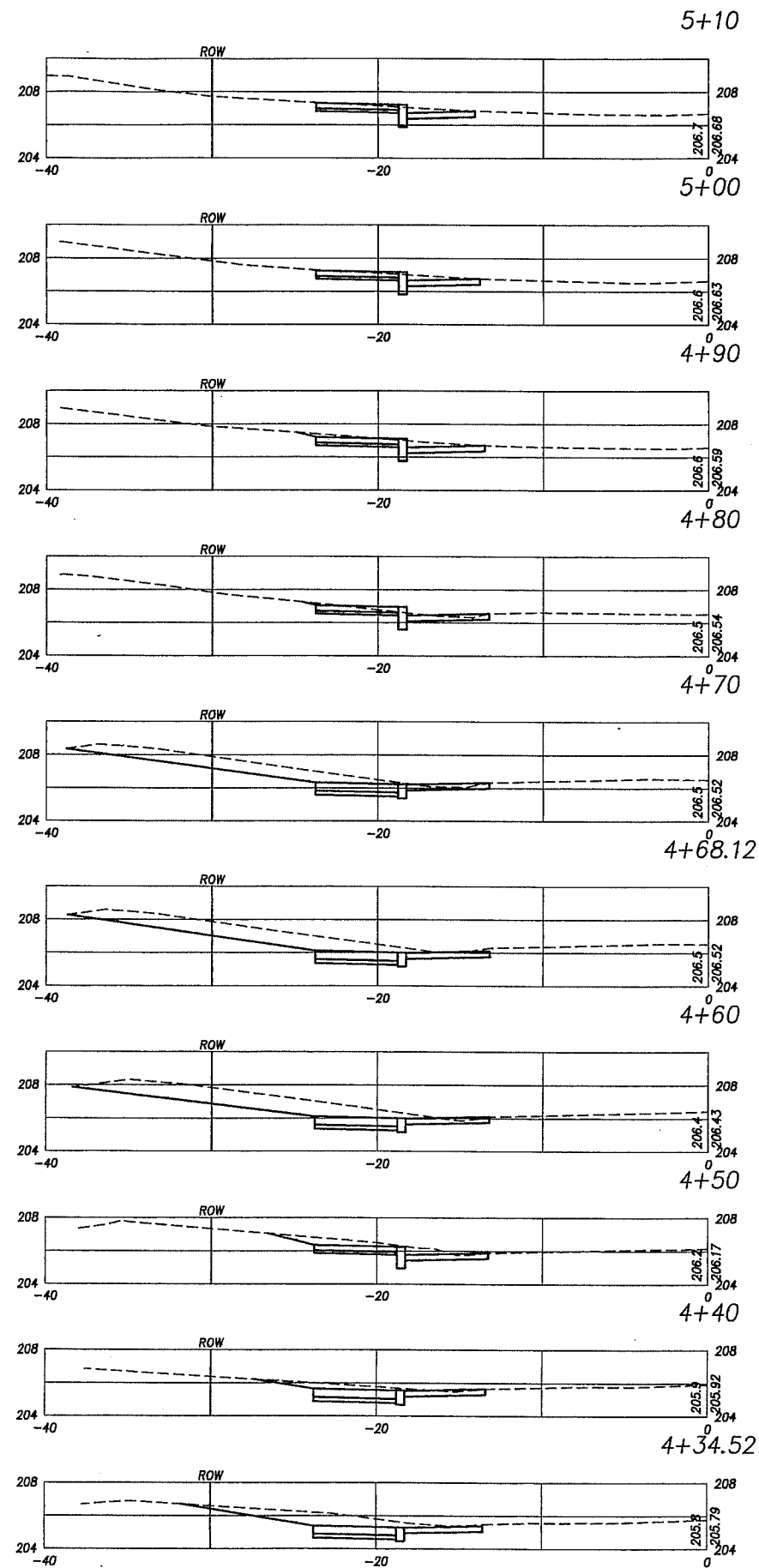
1" = 5' (HORIZ. & VERT.)



**Harper
Houf Peterson
Righellis Inc.**

ENGINEERS • PLANNERS • SURVEYORS
5200 SW MACADAM AVENUE, SUITE 580, PORTLAND, OR 97239
TEL 503.221.1131 www.hhpr.com FAX 503.221.1171





N.E. 23RD AVENUE
1" = 5' (HORIZ. & VERT.)



Harper
Houf Peterson
Righellis Inc.

ENGINEERS • PLANNERS • SURVEYORS
5200 SW MACADAM AVENUE, SUITE 580, PORTLAND, OR 97239
TEL 503.221.1131 www.hhpr.com FAX 503.221.1171

